



High Quality Foods at a Reasonable Price

Lesson Overview

This lesson teaches clients how to plan and eat low-cost, nutritious meals. Using the Recipes and Tips for Healthy Thrifty Meals, clients learn that they can eat well-balanced meals despite budget limitations. Clients also learn the price of meals can be reduced even further if they buy fruits and vegetables in-season. A list of seasonal fruits and vegetables is provided.

Rationale

Eating nutritious foods helps lower the risk of developing many harmful diseases like breast cancer.

Goals

Clients will plan and eat low-cost, nutritious meals.

Objectives

- Clients will understand that they can prepare healthy meals despite budget limitations.
- Clients will buy nutritious foods.
- Clients will prepare and eat nutritious meals.

Lesson



Pass out copy(ies) of What Do You Think? Ask client(s) to complete the What Do You Think? handout. Collect handout(s).

Approximately 1/3 of all cancer deaths are related to the foods you eat. So, if you want to decrease your chances of getting cancer, you need to watch what you eat. You want to make sure you limit the amount of fatty foods you eat and eat more fruits and vegetables. But eating more fruits and vegetables and less fatty foods doesn't have to cost more.

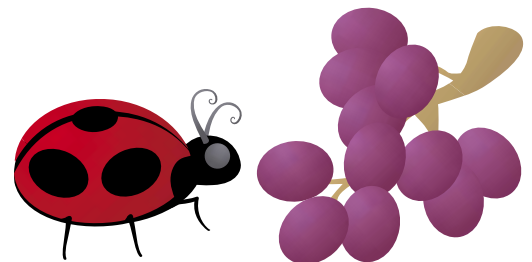
Time
45 minutes

Preparation

- Read through the Thrifty Food Plan, 1999 (see Appendix)
- Read through lesson
- Copy assesment and handouts
- Make culturally appropriate substitutions in the To Good Health! Menu

Handouts

- Recipes and Tips for Healthy, Thrifty Meals (see Appendix)
- Can't Afford to Buy Fruits and Vegetables for Your Family?
- Seasons
- What Do You Think?



High Quality Foods at a Reasonable Price

There are a lot of nutritious foods available to those of us on a tight budget. Let's take a look at the Recipes and Tips for Healthy, Thrifty Meals.

- Give the client Recipes and Tips for Healthy, Thrifty Meals. Point out that the recipes tell them how to make some of the foods on the menu. Go through the booklet, explaining that we can all eat foods that are good for us. It just takes a little planning. Luckily, this booklet helps. It is full of tips, menus, recipes and shopping lists. And planning doesn't necessarily mean more time--planning may actually save time. Go through tips for planning, shopping, best buys for cost and nutrition, tips for healthy cooking and menus.

This booklet shows you 2 weeks worth of menus for a family of four. Food lists are included so you can take with you when you go to the grocery store. There are also recipes for some foods you may not be familiar with. If you buy foods according to this plan, you and your family can eat a nutritious meal at a minimal cost. Let's take a look.

- Review the weekly menus with the client. Tell her/him that this menu (p. 14-15) and grocery list (p. 70-71) were developed with cost, convenience, taste, and nutrition in mind. Show the client how the grocery list and the menus are related. For example, point out the grocery list (p. 70-71) calls for 6 apples. Apples aren't served until Saturday (p. 14-15), but the client will need to buy them while she/he is at the grocery store so she/he will not need to go later in the week. This will save her/him time in the long run. Review all the foods with the client. Make any necessary substitutions and review any concerns with the client.




A lot of people think they can't afford good, nutritious foods when they are on a budget. But that is not necessarily the case.

- Give clients the Can't Afford to Buy Fruits and Vegetables for Your Family? handout. Point out how much more food she/he can buy with the same amount of money. She/he can buy a lot more food that is more nutritious if she/he buys Bag #1. Not only can you buy more food that will last longer - you can also buy more nutritious foods for the same amount of money. This means you are getting more food and more nutrition for the same amount of money!

As you can see, you can buy a variety of foods for \$42 that are high in nutrition if you plan well. This is a sample of foods, but you can buy other, nutritious foods for the same total money.

- Brainstorm some alternatives with the client. For instance, clients can buy whole, salt-free peanuts instead of peanut butter, or peaches instead of apples, etc. Tell clients they can save even more money if they buy foods according to season. Fruits and vegetables are cheaper when they are "in-season." Use the Seasons handout to go through which fruits and vegetables are the least expensive. For instance, if it is summer, she/he may want to buy tomatoes rather than broccoli. The best time to buy broccoli is in fall.

Do you think you can try to prepare nutritious meals for you and your family?

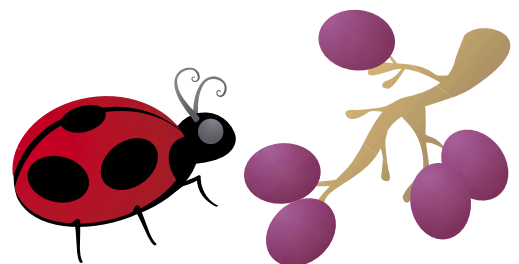
-  Discuss barriers to preparing nutritious meals and brainstorm ways to overcome those barriers. Go through the tips for planning and shopping, food safety and cooking techniques in Recipes and Tips for Healthy, Thrifty Meals.
-  Pass out the What Do You Think? handout again. After the client(s) have completed it (them), discuss answers. See if anyone's answers changed from the beginning of the lesson. If so, ask them to tell you why. Review answers that were marked "Don't know" or "Disagree." Collect the handout(s).
-  Conclude by reviewing affordable foods that are high in nutrition and fit within a tight budget. Emphasize how important it is to maintain a nutritious diet in preventing the risk of developing breast cancer and the importance of preventing breast cancer even if clients do not feel they are at risk.

Educational Activities

- Meet with client(s) every other week for 6-8 weeks. Review how the plan worked. Make appropriate substitutions. Help the client change the menu so that it does not become boring. For instance, move Wednesday Week 2 to Saturday Week 1. Help the client make similar substitutions, making sure she/he chooses foods of similar nutritional quality.
- Prepare some of the recipes in a cooking class. Let clients sample the menu items.
- Ask a local dietitian (see Ask A Dietitian in Appendix) to speak to a group of clients about buying foods seasonally to help minimize costs.

Related Lessons

- Healthy Eating 1.2: If I Eat This Many Servings, Won't I Look Like The Food Guide Pyramid?
- Healthy Eating 1.3: Feeling Fine With Five Fruits And Vegetables A Day
- Healthy Eating 1.4: Packaged And Ready-To-Go Fruits and Vegetables
- Healthy Eating 1.5: Fat Know How
- Healthy Eating 1.6: The Skinny On Fat
- Healthy Eating 1.7: What Do Nutrition Labels Really Tell Us?

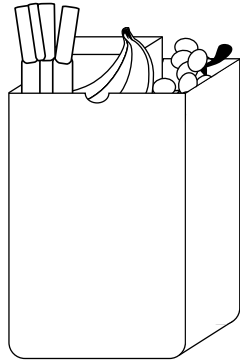


Can't Afford to Buy Fruits and Vegetables for Your Family?

You CAN have healthy snacks for your family that are affordable!

Let's compare 2 bags of groceries:

Bag #1



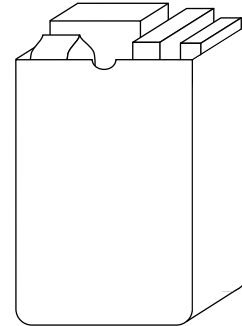
Filled with a variety of high quality, delicious snacks with nutrients, vitamins and minerals for better health.

18 items

Total Price \$42

3 lb. Apples
1 bag Baby Carrots
1 bunch Celery
2 lb. Grapes
2 lb. Banannas
8 oz. Kraft Reduced-Fat Monterey Jack Cheese
1 pkg. Precious String Cheese
1 pkg. Canteca Whole Wheat Tortillas
1 pkg. Western Bagel Whole Wheat Bagels
1 pkg. Back to Nature Granola
64 oz. Mott's Apple Juice
1 jar Skippy Peanut Butter
1 box Best Yet Honey Nut Toasted Oats Cereal
1/2 Gal. 1% Milk
4 containers Dannon Light & Fit Yogurt
8 oz. Philadelphia Fat-Free cream Cheese
1 Box Nabisco Reduced Fat Wheat Thins
1 box Kellogg's Nutra Grain Fruit Twists

Bag #2



Loaded with saturatef fat, salt and sugar—all shown to have negative effects on your health.

14 items

Total Price \$42

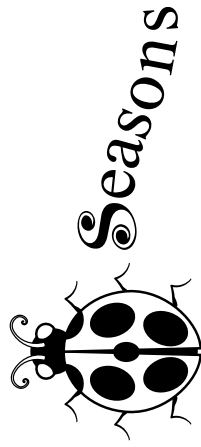
1 bag Nabisco Candy Chips Ahoy cookies
1 box Captain Crunch Berries cereal
1/2 gal. Whole Milk
1 bag Mini Oreos
1 pkg. Ore Ida Cheeseburger Bagel Bites
1 pkg. Croissant Pockets Pepperoni Pizza
1 pkg. Red Baron Pizza Pouches
1 6-pack Coke
1 bag Cheetos
1 bag Ruffles potato Chips
1 box Cracker Jacks
2 pkg. Lunchables
1 pkg. Kellogg's Pop Tarts
5 candy bars

Bag #1 is your best cost & nutrition value!

WHICH WILL YOU CHOOSE ON YOUR NEXT SHOPPING TRIP?

Written by the Frontier Nutrition Project


All items purchased at Top's Market, Weaverville, CA. For more information on the Frontier Nutrition Project please contact Lisa Preschel-Quinn at (530)623-1499

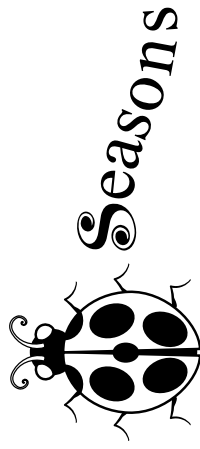


Seasonal Fruits and Vegetables



The following table shows when certain fruits and vegetables are the least expensive. Fruits and vegetables tend to cost less money when you buy them in-season.

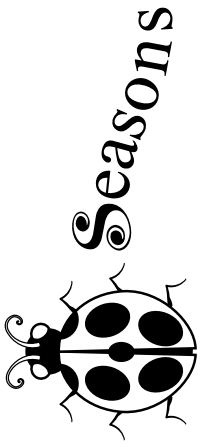
You can also use this table to determine which vitamins and minerals you are getting. Remember. . . a healthy diet includes a variety of vitamins and minerals. So you should try to add as many different fruits and vegetables as possible.

 Fall	<u>Vitamin A</u>	<u>Vitamin C</u>	<u>Vitamin E</u>	<u>Calcium</u>	<u>Iron</u>	<u>Potassium</u>	<u>Folate</u>
Avocado	●	●	●		●	●	
Green Beans	●	●					●
Beets		●					●
Bock Choy	●	●					●
Broccoli		●					●
Brussels Sprouts	●	●				●	●
Cabbage	●	●					
Carrots	●						
Cauliflower	●						●
Collard Greens	●	●					●
Kale	●						
Leek		●					
Lettuce	●	●					
Pumpkin	●	●					●
Spinach	●	●					●
Sweet Potato	●	●				●	
Winter Squash	●	●				●	●




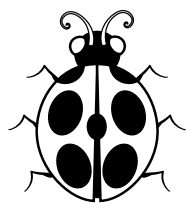
Seasonal Fruits and Vegetables, page 2

 Winter	<u>Vitamin A</u>	<u>Vitamin C</u>	<u>Vitamin E</u>	<u>Calcium</u>	<u>Iron</u>	<u>Potassium</u>	<u>Folate</u>
Banana		●				●	
Cranberries		●					
Red Grapes		●					
Grapefruit		●					
Kiwi		●					●
Kumquat	●	●					
Oranges		●					
Passion Fruit	●	●					●
Pears		●					
Persimmons		●					
Pomegranates	●	●					
Tangelo		●					
Tangerine		●					●
 Spring							
Asparagus							●
Carrots		●				●	
Fennel	●						
Green Onions		●					
Shallots	●						
Spinach	●	●					●
Swiss Chard	●						



Seasonal Fruits and Vegetables, page 3

 Summer	<u>Vitamin A</u>	<u>Vitamin C</u>	<u>Vitamin E</u>	<u>Calcium</u>	<u>Iron</u>	<u>Potassium</u>	<u>Folate</u>
Arugula		●		●			●
Avocado	●	●	●		●	●	
Beets		●					●
Peppers (sweet and bell)	●	●					
Fava Beans	●	●					●
Collard Greens	●	●					●
Corn		●					
Okra		●					●
Peas		●					
Potato							
Shallots	●	●				●	
Summer Squash		●					
Swiss Chard	●						
Tomatoes	●	●					
Zucchini		●				●	



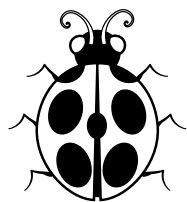
High Quality Foods at a Reasonable Price

What Do You Think?

Here are a few statements about today's lesson. Please mark whether you agree or disagree with each statement.









	Strongly Agree	Mildly Agree	Don't Know	Mildly Disagree	Strongly Disagree
Nutritious foods lower the risk of developing harmful diseases like breast cancer.					
Foods that are good for me are expensive.					
Preparing nutritious meals is time consuming.					
I will save money if I buy fruits and vegetables in-season					

Healthy Lifestyle Curriculum in Reducing the Risk of Breast Cancer: Healthy Eating 1.1

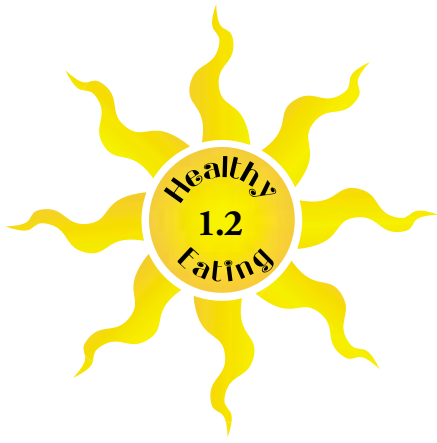


High Quality Foods at a Reasonable Price

What Do You Think? Answer Sheet

	Strongly Agree	Mildly Agree	Don't Know	Mildly Disagree	Strongly Disagree
Nutritious foods lower the risk of developing harmful diseases like breast cancer.					
Foods that are good for me are expensive.					
Preparing nutritious meals is time consuming.					
I will save money if I buy fruits and vegetables in-season					

Healthy Lifestyle Curriculum in Reducing the Risk of Breast Cancer: Healthy Eating 1.1



If I Eat This Many Servings, Won't I Look Like the Food Guide Pyramid?

Lesson Overview

This lesson reviews the different sections of the Food Guide Pyramid, the number of recommended servings within each section, and serving sizes. Clients are asked to apply recommendations to their eating habits.

Rationale

Eating a nutritious diet helps prevent the risk of developing many diseases like heart disease, obesity, stroke, and cancer.

Goals

Clients will use the Food Guide Pyramid to guide their food choices.

Objectives

- Clients will review the principles of the Food Guide Pyramid.
- Clients will understand the difference between a serving size and a portion.
- Clients will choose foods based upon the principles of the Food Guide Pyramid.

Lesson



Pass out What Do You Think? Ask client(s) to complete the handout. Collect it (them).

Approximately 1/3 of all cancer deaths are related to the foods you eat. So, if you want to decrease your chances of getting cancer—not to mention other harmful diseases like heart disease and stroke—you need to watch what you eat. Luckily, tools have been developed to help you do that. Today, we are going to look at one such tool—the Food Guide Pyramid.

Time

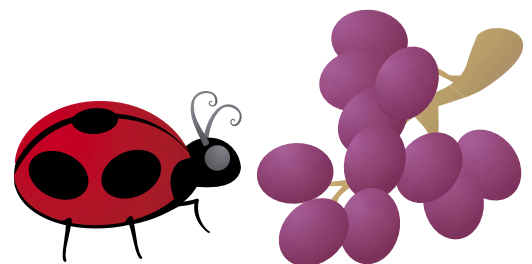
45 minutes

Preparation

- Bring in measuring spoons, measuring cups, and a scale.
- Bring in a variety of foods to measure
- Read through lesson

Handouts

- Food Guide Pyramids
- Are You and Your Family Eating Enough Servings?
- Sizing Up Servings
- How Do I Keep Track Of How I Am Doing?
- What Do You Think?



If I Eat This Many Servings, Won't I Look Like the Food Guide Pyramid?

Our bodies need a lot of different things to run properly. When we're eating, sometimes we don't think about that—especially if we are always eating on the run. We may not normally think about whether we are getting enough calcium for our bones, enough iron for our blood, or enough glucose for our brains. We may not be thinking of that at all—but our bodies are. They need certain things in order to run properly.

Think about a car. It won't run if you put oil in the gas tank—will it? Well our bodies can't run the way they were designed to if we don't put in the “right” fuel either.

Luckily, there is any easy way to make sure we get the “right” fuel. The “right” fuel means eating all the nutrients our bodies need. One way to make sure we do this is to follow the guidelines of the Food Guide Pyramid.

The Food Guide Pyramid was developed for people to use to guide their food choices. Instead of counting calories and fat grams, people can use the Food Guide Pyramid to choose actual foods. Let's take a look at the Food Guide Pyramid.

Pass out the Food Guide Pyramid. Show clients the Food Guide Pyramid that fits their culture (see Appendix for culturally-adapted Food Guide Pyramids, from the Nutrition Education for New Americans Project). Review each section, emphasizing that we want to base our food intake on grains, vegetables and fruits and only supplement with milks and meats. Point out the this is the very essence of the Food Guide Pyramid—instead of searching for foods that contain carbohydrates, proteins, and specific vitamins and minerals, people choose foods, like grains, legumes, and vegetables. Give culturally-appropriate examples of foods that fall into each section of the Food Guide Pyramid. For example, clients may eat *juevos rancheros*. The *juevos* count as one (perhaps two or three) servings of the “meat, poultry, fish, dry beans, eggs and nuts” group. If clients add cheese, they are eating one (or two or three) servings of “milk, yogurt and cheese.” Mark off the appropriate boxes on the How Do I Keep Track of How I'm Doing? handout. If clients add onions, bell peppers and tomato, they may be getting one or two servings of vegetables.

From this example, you can see it may not be as difficult to get the recommended number of servings as you thought. In one food, *juevos rancheros*, you covered three categories. If you added a bread, like a corn tortilla, and fruit, you would be eating a well-balanced meal. Now you can look at the How Do I Keep Track of How I'm Doing? handout and see what boxes still need to be filled. In this example, you can eat more bread and fruit.

Let's look at how many servings we need. Most women need about 1600 calories. Like I said before, we can use the Food Guide Pyramid to choose foods, not just count calories. So instead of counting calories, let's look at this in terms of how many servings of each food group we need to get 1600 calories.

Review the Are You and Your Family Eating Enough Servings? handout. Make sure you emphasize the difference between a serving and a portion. A serving is a standard measure. A portion is simply what you serve yourself.

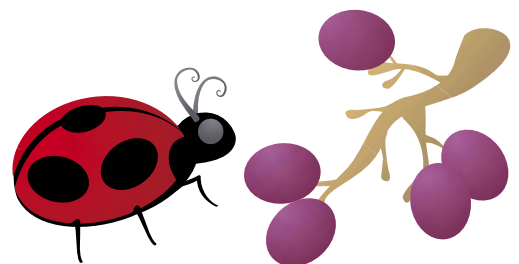
It may not always be easy to estimate how much you are eating. If you know what a serving looks like, you can estimate or “eyeball” servings to estimate whether you are eating more or less than a serving. We are going to weigh and measure some foods that you commonly eat. The next time you eat these foods, ask yourself whether or not you serve yourself a portion, or whether you are really serving yourself a serving. You may be surprised.

💧 Weigh and measure serving sizes of foods client(s) typically eat. Show the serving on a plate, bowl, or other serving dish so that the client can see what it looks like in or on the dish they usually like to eat. Ask the client whether they thought a serving was smaller or larger than this. Discuss.

💧 Pass out the Sizing Up Servings handout and discuss. Review the number of servings in each section of the Food Guide Pyramid and common items they can use to estimate serving sizes. Tell clients that weighing and measuring is more accurate, but using common items to estimate size is often a good alternative. This handout should only be used as a reference.

For the next few weeks, I'd like you to fill out the How Do I Keep Track of How I Am Doing? worksheet. Just check the boxes whenever you eat a serving of each food group. For instance, if you have beef with vegetables and rice for dinner, check off a meat, vegetable, and a grain box. Do this for the other foods you eat throughout the day. By the end of the day, see if you are eating according to the Food Guide Pyramid (use food example from the client's culture)—or is your Food Guide Pyramid tipping to one side. That is, are there too many boxes marked in one group and not enough marked boxes in another.

💧 Go through an example with the client. Remind clients that it may be difficult to eat the recommended number of servings in each group. At first clients may notice they are eating too much or too little of certain foods. This is part of the learning process. They can work on eating less of some things and more of other things as they learn to monitor their eating habits. For instance, if a client is eating:



If I Eat This Many Servings,
Won't I Look Like the Food Guide Pyramid?

Menu:

Breakfast

Biscuit (bread)
Steak (meat)

Lunch

Hamburger (2 breads, meat)
Coleslaw (vegetable)
Soda

Dinner

Fried Chicken (poultry)
Carrots (vegetable)
Rice (rice)

Bread, cereal, rice, and pasta	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Vegetables	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Fruits	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Milk, yogurt, and cheese	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Meat, poultry, fish, dry beans, eggs, and nuts	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

then you can help her/him eat less meat and more fruits and vegetables.

Menu (taken from Week II in Recipes and Tips for Healthy, Thrifty Meals):

Breakfast

Orange Juice (fruit)
Biscuit (bread)

Lunch

Chicken (poultry)
Mixed Vegetables (vegetables)
Grapes (fruit)
Bread (bread)
Milk (milk)

Dinner

Southwestern Salad (2 vegetable serv.)
Steamed Rice (rice)
Orange and Apple Salad (2 fruit servings)
Milk (milk)

Bread, cereal, rice, and pasta	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Vegetables	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Fruits	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Milk, yogurt, and cheese	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Meat, poultry, fish, dry beans, eggs, and nuts	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Ask the client if she/he wants to meet again to discuss what she/he ate and how to improve it. If she/he does, have her/him bring in one week's worth of How Do I Keep Track of How I Am Doing? handouts. Review and reinforce positive eating habits—like eating 5 servings of vegetables (remember clients may be eating more than 1 serving when they eat a meal—for example 3 broccoli florets may be 2-3 servings). Review any areas that need improvement. For example, if she/he eats 5 servings of meat, discuss substituting vegetables for meat in certain dishes. She/he may add bell peppers to a stir fry rather than chopped chicken.

💧 If the client does not want to meet again, ask her/him to use the How Do I Keep Track of How I Am Doing? handout to see if they are eating according to the recommendations. If not, tell her/him to think of things she/he ate yesterday. Check off the appropriate boxes as the client tells you what she/he ate. Review and suggest things she/he can do differently.

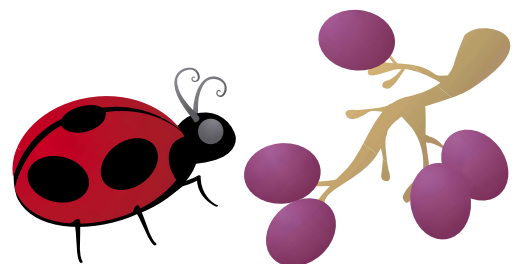
💧 Remind clients that they may not eat the recommended number of servings at first—the important thing is they get closer and closer to those recommendations. Go through a few more examples with the client if you have time.

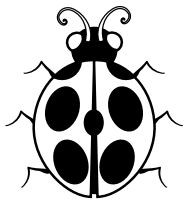
Educational Activities

- Teach this lesson while conducting a cooking class. At the end of the class, serve everyone one serving of each food. Make sure all the food groups are used to prepare the meal.
- Review How Do I Keep Track of How I Am Doing? handout for the next few weeks. Compare to first week. See if clients have made any improvements.
- See if clients can match foods with food groups. Use the Foods in the Food Guide Pyramid (see Appendix). Add other foods and additional combination foods.

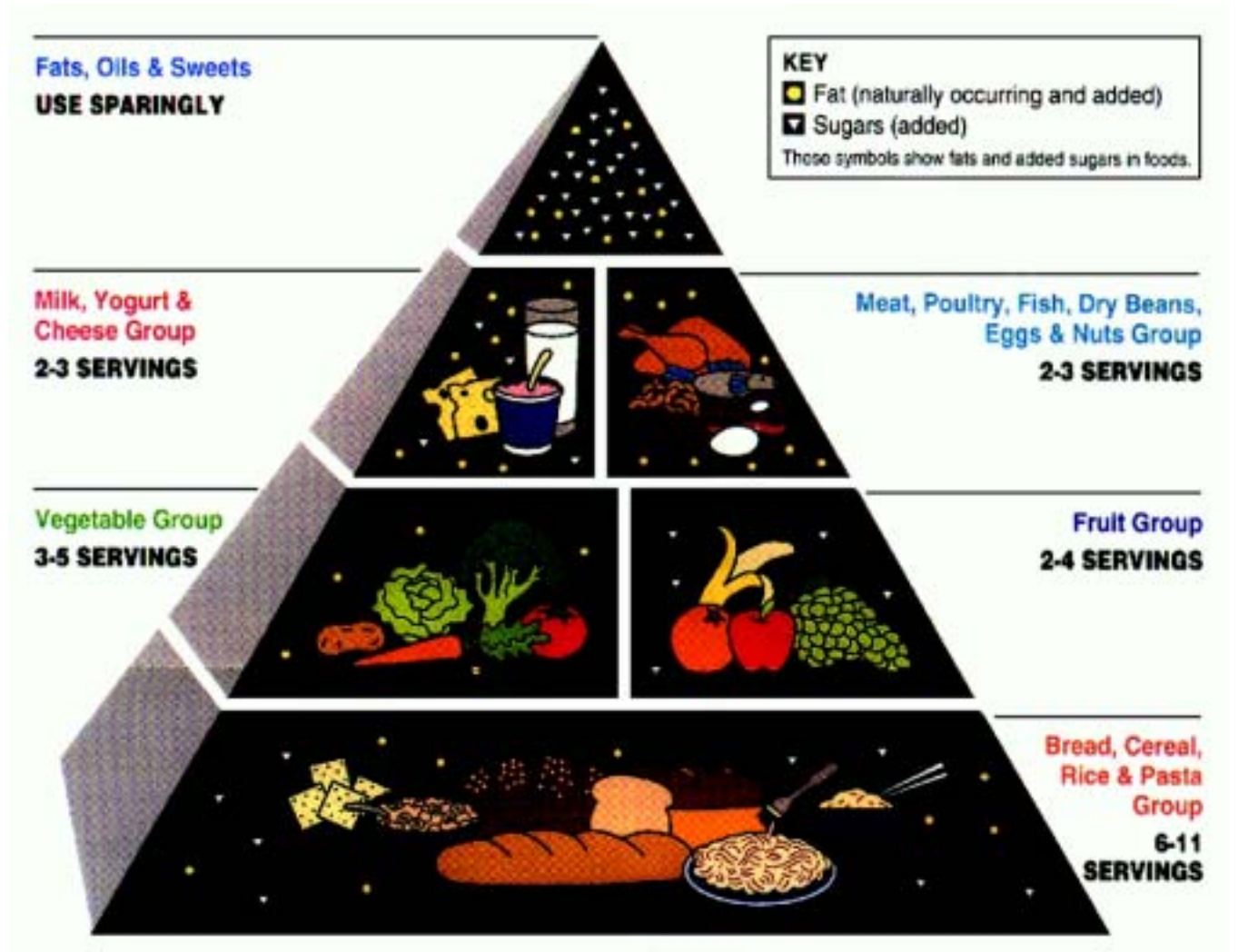
Related Lessons

- Healthy Eating 1.1: High Quality Foods At A Reasonable Price
- Healthy Eating 1.3: Feeling Fine with Five Fruits and Vegetables A Day
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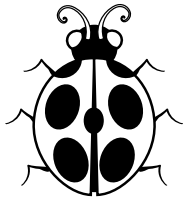




The Food Guide Pyramid



Adapted from the United States Department of Agriculture/United States Department of Health and Human Services Food Guide Pyramid.



Are You and Your Family Eating Enough Servings?

Most women need approximately 1600 calories per day. Some older adults and children between the ages of 2 and 6 also need 1600 calories. This is:

6 servings of	bread, cereal, rice, and pasta
3 servings of	vegetables
2 servings of	fruits
2 or 3 servings of	milk, yogurt, and cheese
2, for a total of 5 oz.	meat, poultry, fish, dry beans, eggs, and nuts

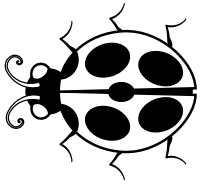
Most children over 6 years old, teenage girls, active women, and sedentary men need 2200 calories. 2200 calories means eating:

9 servings of	bread, cereal, rice, and pasta
4 servings of	vegetables
3 servings of	fruits
2 or 3 servings of	milk, yogurt, and cheese
2, for a total of 6 oz.	meat, poultry, fish, dry beans, eggs, and nuts

Most teenage boys and active men need 2800 calories. 2800 calories means eating:

11 servings of	bread, cereal, rice, and pasta
5 servings of	vegetables
4 servings of	fruits
2 or 3 servings of	milk, yogurt, and cheese
2, for a total of 7 oz.	meat, poultry, fish, dry beans, eggs, and nuts

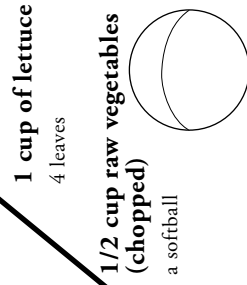
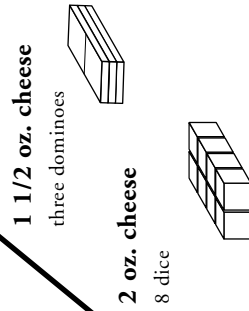
Where do fall? Do you need 1600, 2200, or 2800 calories per day?



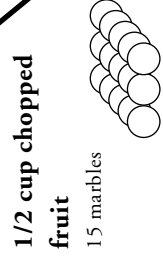
Sizing up Servings

Use these examples of everyday items to size up your portion sizes. Watching how much you eat is just as important as watching what you eat.

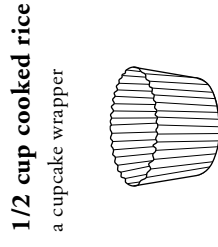
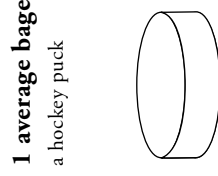
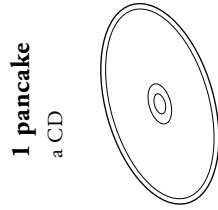
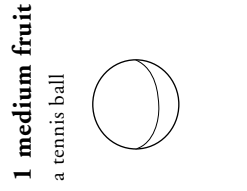
Milk, Yogurt & Cheese Group 2-3 Servings



Vegetable Group 3-5 Servings

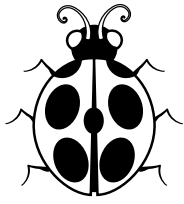


Fruit Group 2-4 Servings



Bread, Cereal, Rice & Pasta Group 6-11 Servings

Adapted from Sizing Up Servings, Beth Rosen, RD.



How Do I Keep Track Of How I Am Doing?

Bread, cereal, rice, and pasta

☐☐☐☐☐☐☐☐☐☐☐☐

Vegetables

☐☐☐☐☐

Fruits

☐☐☐☐

Milk, yogurt, and cheese

☐☐☐

Meat, poultry, fish, dry beans, eggs, and nuts

☐☐☐

Bread, cereal, rice, and pasta

☐☐☐☐☐☐☐☐☐☐☐☐

Vegetables

☐☐☐☐☐

Fruits

☐☐☐☐

Milk, yogurt, and cheese

☐☐☐

Meat, poultry, fish, dry beans, eggs, and nuts

☐☐☐

Bread, cereal, rice, and pasta

☐☐☐☐☐☐☐☐☐☐☐☐

Vegetables

☐☐☐☐☐

Fruits

☐☐☐☐

Milk, yogurt, and cheese

☐☐☐

Meat, poultry, fish, dry beans, eggs, and nuts

☐☐☐

Bread, cereal, rice, and pasta

☐☐☐☐☐☐☐☐☐☐☐☐

Vegetables

☐☐☐☐☐

Fruits

☐☐☐☐

Milk, yogurt, and cheese

☐☐☐

Meat, poultry, fish, dry beans, eggs, and nuts

☐☐☐



What Do You Think?

Here are a few statements about today's lesson. Please mark whether you agree or disagree with each statement.

	Strongly Agree	Mildly Agree	Don't Know	Mildly Disagree	Strongly Disagree
Nutritious foods lower the risk of developing harmful diseases like heart disease and stroke.					
The Food Guide Pyramid helps me eat nutritious foods.					
The Food Guide Pyramid helps me eat a well-balanced diet.					

Please mark TRUE if you agree with the statement or FALSE if you do not agree with the statement.







TRUE FALSE

A portion is the same thing as a serving.

I should eat more servings of foods at the top of the Food Guide Pyramid.



What Do You Think? Answer Sheet

	Strongly Agree	Mildly Agree	Don't Know	Mildly Disagree	Strongly Disagree
Nutritious foods lower the risk of developing harmful diseases like heart disease and stroke.					
The Food Guide Pyramid helps me eat nutritious foods.					
The Food Guide Pyramid helps me eat a well-balanced diet.					

Please mark TRUE if you agree with the statement or FALSE if you do not agree with the statement.

A portion is the same thing as a serving.

This statement is FALSE. Serving sizes are defined amounts of food; portions are not (refer to Sizing Up Servings handout). Portions are different for different people and may be much larger than serving sizes.

I should eat more servings of foods at the top of the Food Guide Pyramid.

This statement is FALSE. The closer you are to the top of the Pyramid, the fewer servings you want to eat (refer to the Food Guide Pyramid handout). You want to eat the most servings of breads, cereals, rice and pasta.



Feeling Fine With Five Fruits and Vegetables a Day

Lesson Overview

In this lesson, clients learn about the nutritional value of fruits and vegetables. They learn fruits and vegetables have an abundance of vitamins and minerals that help the body function properly and prevent harmful diseases like cancer, heart disease and stroke.

Rationale

A healthy diet includes eating five fruits and vegetables a day. Fruits and vegetables are good sources of vitamins and minerals.

Goals

Clients will eat more fruits and vegetables.

Objectives

- Clients will understand that fruits and vegetables are part of a healthy diet.
- Clients will understand that fruits and vegetables are good sources of nutrients that help prevent the risk of breast cancer and many other forms of cancer.
- Clients will agree to eat one more fruit and one more vegetable per day for the next week.

Lesson



At the beginning of this lesson pass out Right Now. Give clients a few minutes to review and complete the worksheet. If clients do not feel comfortable writing, ask them the questions verbally.

Fruits and vegetables, especially dark leafy green and yellow vegetables, have been shown to decrease the risk of many forms of cancer. In addition to fighting off many forms of cancer, eating a

Time
1 hour

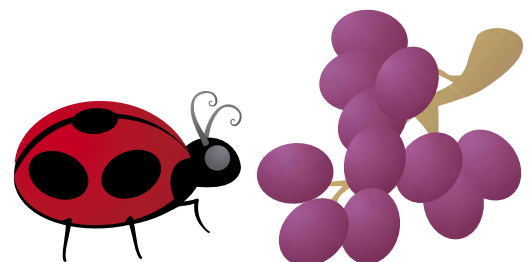
Preparation
• Read through lesson

Materials Needed

- Pen or pencil
- Flip chart or chalkboard if you are in a group setting

Handouts

- Food Guide Pyramid
- Foods and Their Nutrients
- Fruits and Vegetables I Like to Eat
- Right Now
- What Do You Think?



Feeling Fine With Five Fruits and Vegetables a Day

healthy diet full of a variety of fruits and vegetables helps decrease the risk of heart disease, diabetes, stroke, and obesity.

Even though many people know this, they still find it difficult to eat the recommended number of servings of fruits and vegetables a day.



Pull out the Food Guide Pyramid handout and have clients point out the recommended number of servings of fruits and vegetables.

Fruits and vegetables provide an abundance of vitamins, minerals, and other substances that help prevent cancer. To name a few, fruits and vegetables contain:

VITAMIN

Vitamin A

BENEFITS OF THIS NUTRIENT

Keeps eyes healthy

GOOD SOURCES OF THIS VITAMIN

Leafy greens like kale and spinach; red, orange and yellow fruits and vegetables like cantaloupe, peaches, papaya, mango, apricot, tomatoes, carrots, sweet potatoes, winter squash, peppers

Vitamin C

Keeps you from getting ill, helps heal cuts

Citrus fruits like grapefruit, guava, tangerine, orange and mandarin orange, cantaloupe, honeydew melon, mango, strawberries, watermelon, broccoli, Brussels sprouts, cabbage, leafy greens like kale, red and green peppers, plantain, snow peas, sweet potato, tomato

Vitamin E

Helps the body heal itself

Almonds, hazelnuts (filberts), sunflower seeds, vegetable oils, whole grains, peanut butter

Folate

Helps make red blood cells

Black-eyed peas (cowpeas), navy beans, cooked lentils, cooked spinach, avocados

MINERALS

Calcium

Builds healthy bones and teeth, helps clot your blood

GOOD SOURCES OF THIS MINERAL

Leafy greens like turnip greens and spinach, broccoli, tofu (bean curd)

Iron

Carries oxygen through your body

Leafy greens like kale and spinach, lima beans, soybeans, dried figs

There are other good reasons to eat more fruits and vegetables.

- Eating more fruits and vegetables is easy to do. You can keep them in your refrigerator or freezer. Have you ever bought fresh fruits and/or vegetables and had them spoil in the refrigerator. Well, did you

know that you can also buy them frozen? If you buy them frozen, you are still getting a lot of the nutrients that you would be getting buying them fresh.

- Fruits and vegetables are inexpensive when they are in-season (Healthy Eating 1.1). If you buy fruits and vegetables that are in-season, then they usually cost less than meat, chicken, poultry, and prepared food (see Seasons handout of Healthy Eating 1.1).

💧 Calculate an example. A bunch of spinach costs \$0.59 a pound vs. the price of ground beef at \$1.29 a pound. If possible, show client(s) what 1 pound of each looks like. One pound of spinach is a lot more than one pound of meat.

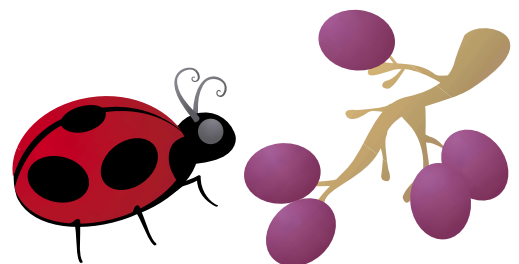
- By eating more fruits and vegetables you are also eating more food for fewer calories. Most fruits and vegetables are low in fat AND calories. Therefore you can eat a LOT but still eat below your calorie goals.
- Fruits and vegetables contain other nutrients that may help prevent cancer. These other nutrients cannot be captured in a bottle or pill—they can only be found by eating the real thing—the whole fruit and vegetable!

So now, knowing that fruits and vegetables are a part of a healthy diet, and, knowing that they help prevent cancer in addition to many other diseases like heart disease, diabetes, stroke, and obesity, let's see where you can add fruits and vegetables into to your diet.

💧 Go over the Fruits and Vegetables I Like to Eat handout. If you are in a group setting have clients call out fruits and vegetables they are familiar with. Write each one on a flip chart or chalk board.

💧 Help clients if they can't think of fruits and vegetables by using the Foods and Their Nutrients handout. If you are in a group setting, refer clients to the foods listed on the flip chart or chalk board.

💧 Before clients leave, refer to their Fruits and Vegetables I Like To Eat handout and have them commit to adding one fruit and one vegetable to their diet each day. Tell them that you will go over their plan next session. More advanced students can use the How Do I Keep Track of How I Am Doing? handout in Healthy Eating 1.2. Ask clients to focus on the fruits and vegetables. See if they can eat 4 fruits and 5 vegetables on one day during the next week. Once they do that, see if they can eat 4 fruits and 5 vegetables two days during a week. If they can, try three. Continue until they are able to eat 4 fruits and 5 vegetables every day. You may want to provide an award once clients achieve this goal (see Appendix).



Feeling Fine With Five Fruits and Vegetables a Day



Pass out the What Do You Think? handout. Review and discuss clients' responses.

Educational Activities

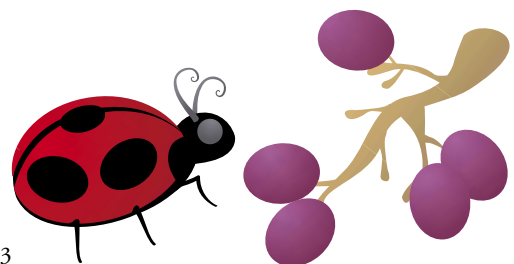
- Try new fruits and vegetables in a cooking class.
- Have clients try one new fruit and vegetable each week.
- Demonstrate different preparation methods for fruits and vegetables. For instance, contact your local WIC agency or dietitian and ask them to participate in a cooking class. Have them prepare vegetables in vegetable broth, stir frying, blanching, etc.*
- Have a local dietitian take clients to the local grocery store and visit the fruits and vegetables section. Have her/him point out which fruits and vegetables are good sources of particular vitamins and minerals.

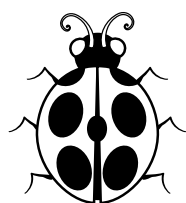
Check to see if any stores or markets have an "Ask-The-Dietitian" program, a program that takes clients for tours in the stores or markets (see Appendix).

Related Lessons

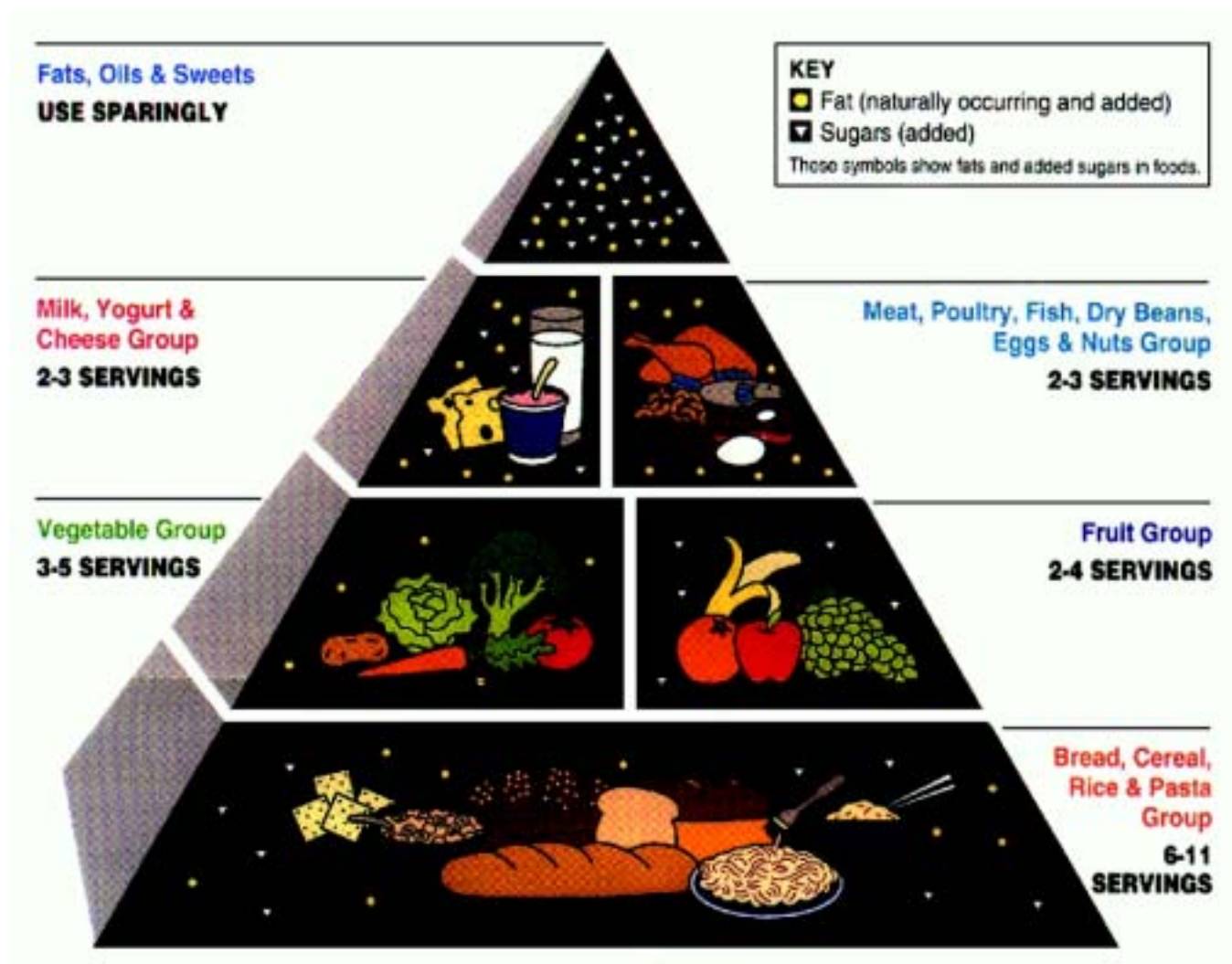
- Healthy Eating 1.2: If I Eat This Many Servings, Won't I Look Like the Food Guide Pyramid?
- Healthy Eating 1.4: Packaged and Ready-To-Go Fruits and Vegetables

* There are free and low-cost fruit and vegetable materials available from the Clearinghouse. See the Appendix.

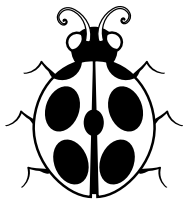




The Food Guide Pyramid

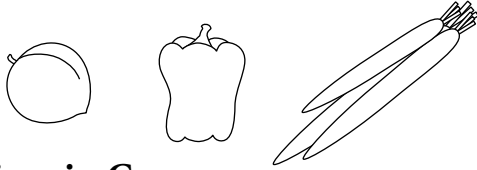


Adapted from the United States Department of Agriculture/United States Department of Health and Human Services Food Guide Pyramid.



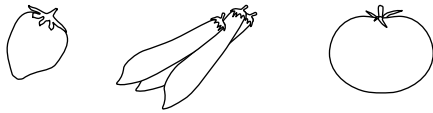
Foods and Their Nutrients

Vitamin A



Leafy greens like kale and spinach, cantaloupe, peaches, squash, mango, apricot, papaya, guava, carrots, peppers

Vitamin C



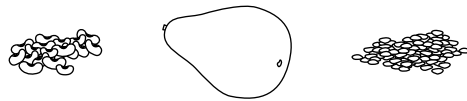
Citrus fruits like grapefruit, guava, tangerine, orange and mandarin orange, cantaloupe, Papaya, honeydew melon, mango, strawberries, watermelon, broccoli, Brussels sprouts, cabbage, leafy greens like kale, red and green peppers, plantain, snow peas, sweet potato, tomato

Vitamin E



Almonds, hazelnuts (filberts), sunflower seeds

Folate



Black-eyed peas (cowpeas), navy beans, cooked lentils, cooked spinach, avocados

Calcium



Leafy greens like turnip greens and spinach, broccoli, tofu (bean curd)

Iron



Leafy greens like kale and spinach, green beans, lima beans, soybeans, dried figs, raisins, dried apricots, prune juice

- Eating more fruits and vegetables is easy to do.
- Fruits and vegetables are inexpensive when they are in-season.
- By eating more fruits and vegetables you are also eating more food for fewer calories.
- Fruits and vegetables contain other nutrients that may help prevent cancer.



Fruits and Vegetables I Like to Eat

Fruits I like to eat are:

Vegetables I like eat are:

Fruits I would like to try:

Vegetables I would like to try:



Thinking about yesterday, how many fruits did you eat?

At breakfast I ate _____

At lunch I ate _____

At dinner I ate _____

Did you eat fruits any other time of the day? If so, which fruits did you eat?

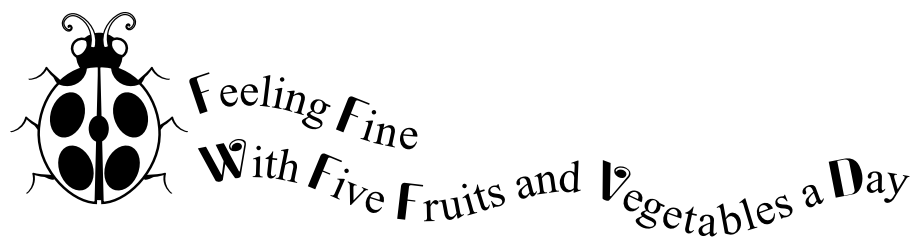
Thinking about yesterday, how many vegetables did you eat?

At breakfast I ate _____

At lunch I ate _____

At dinner I ate _____

Did you eat vegetables any other time of the day? If so, which vegetables did you eat?



What Do You Think?

Here are a few statements about today's lesson. Please mark whether you agree or disagree with each statement.

	Strongly Agree	Mildly Agree	Don't Know	Mildly Disagree	Strongly Disagree
Fruits and vegetables are part of a healthy diet.					
Frozen fruits and vegetables have nutrients that prevent harmful diseases.					
I can eat inexpensive fruits and vegetables.					







Which fruits do you plan to try this week?

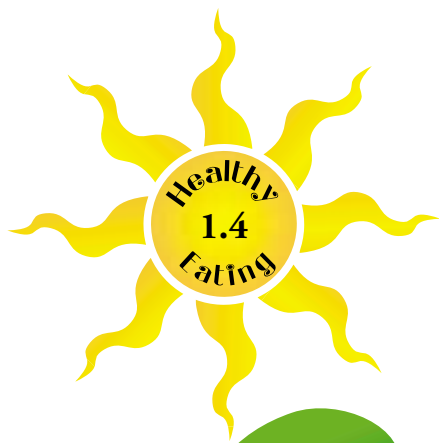
Which vegetables do you plan to try this week?

Healthy Lifestyle Curriculum in Reducing the Risk of Breast Cancer: Healthy Eating 1.3



What Do You Think? Answer Sheet

	Strongly Agree	Mildly Agree	Don't Know	Mildly Disagree	Strongly Disagree
Fruits and vegetables are part of a healthy diet.					
Frozen fruits and vegetables have nutrients that prevent harmful diseases.					
I can eat inexpensive fruits and vegetables.					



Time
50 minutes

Preparation

- Cut up a variety of fruits and vegetables and place in ready-to-go containers (i.e., small baggies, small air-tight containers, small bowls)
- Peanuts, dried cranberries or raisins, and chocolate chips
- Cut up oranges, pineapple, apples and bananas

- Whole kiwis, apples, grapes, star fruit, passion fruit, mangos, and other fruits that are in-season
- Red peppers, potatoes, onions, bok choy, red cabbage, squash, and other vegetables that are in-season
- Prepare ready-to-go snacks for clients
- Read through the lesson

Materials Needed

- Paring knives
- Small containers

Handouts

- Safety First
- Get Five to Nine Without Wasting Any Time
- What Do You Think?

Packaged and Ready-To-Go Fruits and Vegetables

Lesson Overview

Clients learn how to prepare and package healthy snacks.

Related Lessons

A healthy diet includes 5-9 servings of fruits and vegetables per day.

Goals

Clients will eat 5-9 servings of fruits and vegetables per day.

Objectives

- Clients will eat at least 5 fruits and vegetables per day.
- Clients will increase their intake of fruits and vegetables by eating more fruits and vegetables as snacks.
- Clients will learn how to prepare ready-to-eat snacks consisting mainly of fresh fruits and vegetables.

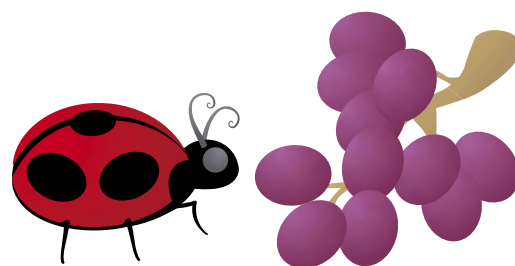
Lesson



Pass out the What Do You Think? handout. Review client's answers. Tell clients that we are going to look at ways to eat more fruits and vegetables.



If possible, have a variety of fruits and vegetables on display. For instance, have a bowl of fresh fruit on a table. Place another bowl of fresh vegetables on the table. Surround this bowl with small, decorative bowls of trail mix (unsalted peanuts, dried cranberries or raisins, and small, chocolate chips), cut up carrots, celery sticks, grapes, kiwi slices, etc. Place small containers of other cut and ready-to-go foods in airtight containers on the table.



Packaged and Ready-To-Go Fruits and Vegetables

💧 Tell clients you are going to talk about ways to incorporate healthier foods into their daily eating habits. Ask clients if they can think of ways they can do this—how can they eat the recommended number of fruits and vegetables? Ask clients what types of things make it difficult to eat fruits and vegetables per day.

💧 Review clients' concerns, being particularly sensitive to issues like time, money, taste preferences, and family. Tell clients you are going to discuss ways to eat more fruits and vegetables without adding any additional burden to their schedules.

You may think it is difficult to incorporate healthy foods into your daily eating habits, but it may not be as difficult as you think. As you can see from this display, you can prepare many different fruits and vegetables ahead of time. If you prepare them ahead of time, you can keep them handy and snack on them during the day instead of other foods that may not be as healthful.

Once you prepare snacks ahead of time, you are ready for the day. You don't need to worry about what to eat for a snack. . . because you already have one on-hand. If something comes up and you won't be able to eat for awhile, you'll be prepared. . . because you have your ready-to-eat snack already prepared. If you are just hungry and want to grab something quick—instead of reaching for the most convenient food, like a candy bar or bag of chips—you can reach for your ready-to-eat snack instead.




Let's look at ways to make snacks into healthier options and then look at how to package them so they are convenient and ready-to-eat.

💧 Take clients around the display table. Show them that you have a fruit bowl and a vegetable bowl. Tell them that having fruits and vegetables in plain view is a reminder to clients and their families that they are available and ready-to-eat. They are much more likely to grab an apple, banana, figs, plums, tangerines, guava, or grapes if they see them on the counter, than if they are tucked away in the refrigerator. A lot of fruits and vegetables actually taste better and last longer if you leave them out of the refrigerator.

💧 Now, show clients little things they can do to make eating fruits and vegetables easier—like cutting up carrots or celery or cantaloupe and other melons into bite size pieces, breaking up bunches of grapes into smaller bunches and placing in baggies, cutting mango and papaya into slices and placing in a bed of greens for a salad.



You can buy some fruits and vegetables already cut and portioned, but you may pay extra money for that. So just take a little time during the week or on the weekend to prepare these items yourself. Then you don't need to worry all week! You can even use these pre-portioned baggies and containers during the week for home-cooked meals. For instance, let's say it is Friday, you're tired and you don't know what to make for dinner. Well, if you have already cut up carrots, bok choy, red peppers, and squash, you could easily

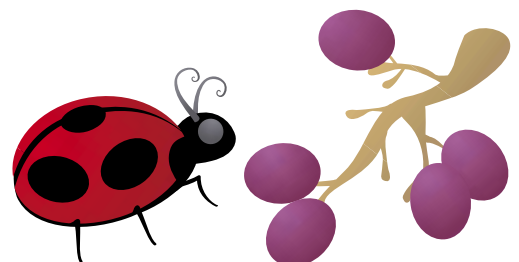
prepare stir-fry. It takes about 20 minutes to cook rice, about 5 minutes to stir-fry the vegetables you have already cut in low-sodium chicken, beef, or vegetable broth (instead of oil). Dinner is ready in 20 minutes! A one-dish wonder that is appealing to the eye (white, orange, green, red, and yellow colors), healthy (lots of vitamins and minerals, fiber, carbohydrate and protein), and delicious!

-  Now show clients some of the other items you prepared. Show them (or explain to them if you don't have access to a sink and water) how to wash fruits and vegetables so that they are free from residue. For instance, wash potatoes in cold water and scrub with a small brush. Demonstrate how to wash berries, peaches and other fruits and vegetables. Pass out the Safety First handout. For a more detailed review, please refer to *The American Dietetic Association's Food & Nutrition Guide* (see Appendix).
-  Show clients how you prepared pre-packaged baggies and containers of food. For instance, show them a small container filled with peanuts, dried cranberries or raisins, and small chocolate chips. Show clients fruit that has been cut up and sprinkled with lemon juice to prevent it from turning brown. Show clients small containers filled with fresh broccoli florets and carrot sticks. These vegetables can be dipped into another container filled with regular yogurt and mixed with cooked spinach.
-  Remind clients that when they are deciding which fruits and vegetables to buy, they should consider buying seasonal produce . Produce that is bought in-season is usually less expensive (refer to Healthy Eating 1.1).

These are just a few things you can do at home to eat more fruits and vegetables while you are lightening your load. Not only will you have more time to spend on other things, you'll also be fueling your body for a healthy, productive day.

Are these ideas you think you can do at home?

-  Pass out and review Getting Five to Nine Without Wasting Time worksheet.
-  If clients are concerned they can not eat enough fruits and vegetables, review **If I Eat This Many Servings, Won't I Look Like the Food Guide Pyramid?** Healthy Eating 1.2. Specifically, you may want to review the Sizing Up Servings handout. As you review the lesson and/or handout point out that clients may be eating more fruits and vegetables than they think they are. For instance, if they eat a large bowl of fruit, they may be getting 2-3 servings of fruit.



- Listen to clients' comments. Provide as much positive reinforcement as possible. If clients are concerned about eating 5 servings of fruits and vegetables, ask the group to troubleshoot. Ask them, how they can incorporate more fruits/vegetables during breakfast? People may add fruit to their cereal, Farina or other hot cereal. People may add diced onions, peppers, and tomatoes to their egg scramble or omelet. Clients can prepare fruit shakes in the morning.

Tip: To prepare fruit shakes, just add yogurt, low-fat or non-fat milk, orange juice and frozen or fresh fruit in a blender. Blend for 15-30 seconds and serve.

- Ask clients how they can add more fruits and vegetables into lunch. People can add diced vegetables into rice, they can carry small baggies of cut up fruits/vegetables, or add lettuce, tomatoes, and onions to sandwiches. If clients eat out during the day, they can look for vegetarian selections, substitute items on the menu (i.e., instead of having French fries, they can ask for a fruit cup or baked potato), or have a piece of fruit for dessert.

- Finally, ask clients how they can add fruits and vegetables into their dinners. Clients can prepare one or two vegetarian meals throughout the week, add vegetables to stews and soups, serve fruit for dessert, etc.

Tip: To thicken soups and stews, simply puree vegetables in a blender and add to the soup or stew.

- Wrap up the session. Remind clients of the reasons they want to eat more fruits and vegetables—to decrease their risk of cancer, and other harmful diseases, as well as maintain their weight, add fiber to their diets, and get more vitamins and minerals.

At first 5 servings of fruits and vegetables may sound like a lot, but you would be surprised at all the times during the day you can fit in a half, one or even two servings of fruits and/or vegetables. You can do small, simple things to make it even easier—keep fruits and vegetables in plain sight, prepare portions ahead of time, add fruits and vegetables into recipes, choose fruit for dessert.

Who's ready to try to eat more fruits and vegetables?

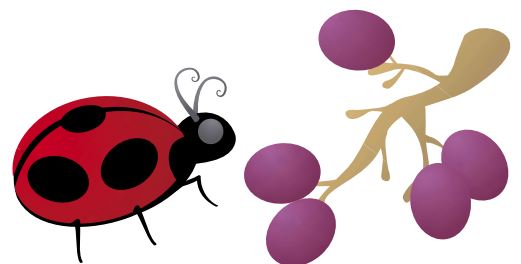
- Pass out the What Do You Think Now? handout. Review clients' answers. Encourage clients to try to eat one more fruit and one more vegetable the next day. If they are able to do that, ask them to try to eat one more fruit and one more vegetable every other day. Once they are able to do that, see if they can do it every day for a week. Continue until clients eat at least 5 fruits and vegetables a day. Once they reach this goal give them an incentive item (see Appendix) for all of their hard work.

Educational Activities

- Ask a Registered Dietitian (see Ask A Dietitian in Appendix) to demonstrate different food preparation methods. Ask her/him to focus on low-cost meals that require minimal preparation and include a variety of fruits and vegetables.
- Go to a produce store or the produce section of a supermarket and ask the produce buyer to talk to the group about buying seasonal produce. Repeat this activity every season (fall, winter, spring and summer) so clients can choose the most reasonably priced produce year-round.

Related Lessons

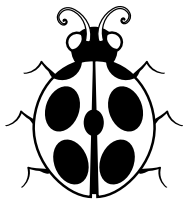
- Healthy Eating 1.2: If I Eat This Many Servings, Won't I Look Like the Food Guide Pyramid?
- Healthy Eating 1.3: Feeling Fine with Five Fruits and Vegetables A Day





As we've talked about, getting your recommended 5-9 servings of fruits and vegetables can be as easy as 1. . . 2. . . 3. There are few things you want to check before you eat those 5-9 servings, however.

- First, when you are at the supermarket make sure the fruits and vegetables you buy are free from cuts, holes, or mold.
- Next, make sure you wash fruits and vegetables with clean water to remove any residue. You don't need to wash fruits and vegetables with soap. A lot of soaps leave their own residue which may cause you to become sick. Just make sure you wash fruits and vegetables thoroughly.
- Make sure you wash fruits and vegetables before you put them in bowls. If you place fruits and vegetables in a bowl before you've washed them, contaminants may touch other foods that are have already been washed.
- You can use a soft bristle brush to clean tough-skinned produce, like carrots, pears, apples, potatoes, yams, sweet potatoes, mangos, papayas, kumquats, and pomegranates.
- When you buy leafy produce, like leeks, bok choy or lettuce, peel off the leaves and wash each piece very carefully. You want to make sure you remove all the hidden residue and dirt.
- And finally. . . always make sure you dry off fruits and vegetables after you wash them!



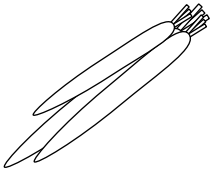
Getting Five to Nine Without Wasting Any Time

A small air-tight container filled with fresh fruit



Baked plantains

Cut peppers, carrots and broccoli dipped in yogurt and cooked spinach dip



Yogurt with fresh fruit

Waffles with jam and strawberries

Baggies filled with dried cranberries, peanuts and little chocolate chips

Baked acorn squash

Boxes of raisins or prunes



Carrot soup in a thermos

Cottage cheese mixed with fruit

Mandarin oranges in a bed of spinach



Sliced kiwi and bananas

Use pureed vegetables as soup and stew thickener



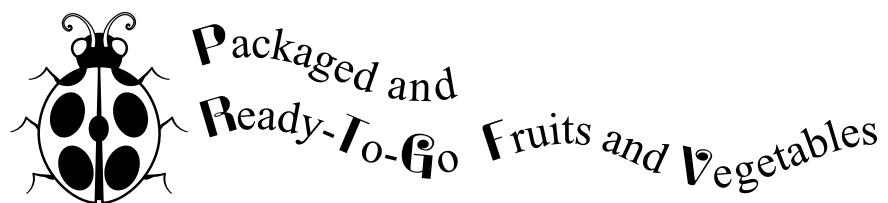
Dip pita slices into a pureed mixture of cooked chickpeas and lemon juice

Fruit smoothies



Add cut up vegetables into soups and stews

Buying dried fruit loose rather than pre-packaged is easier on the budget!



What Do You Think?

Think about yesterday. Can you remember eating any fruits?

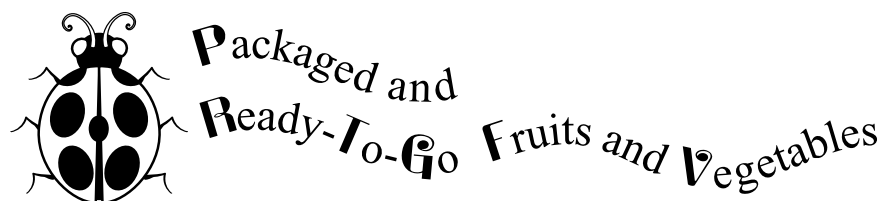
Yes _____ No _____

Can you remember eating any vegetables?

Yes _____ No _____

Here are a few statements about today's lesson. Please mark whether you agree or disagree with each statement.

	Strongly Agree	Mildly Agree	Don't Know	Mildly Disagree	Strongly Disagree
It takes a lot of time to prepare fruits and vegetables.					
I can only eat vegetables at dinner.					
Fruits and vegetables are expensive.					



What Do You Think? Answer Sheet







Name one fruit snack you can prepare tomorrow.

_____ (answers will vary)

Name one vegetable you can prepare tomorrow.

_____ (answers will vary)

Now that we have reviewed the lesson, do you still think. . . .

	Strongly Agree	Mildly Agree	Don't Know	Mildly Disagree	Strongly Disagree
It takes a lot of time to prepare fruits and vegetables.					
I can only eat vegetables at dinner.					
Fruits and vegetables are expensive.					



Fat Know How

Lesson Overview

This lesson reviews the difference between saturated, monounsaturated, polyunsaturated fats and cholesterol and their affect on health. Clients learn how to identify the different types of fat in foods they eat.

Rationale

Eating a low fat diet decreases the risk of developing many forms of cancer.

Goals

Clients will choose foods with lower levels of saturated fat.

Objectives

- Clients will understand the difference between saturated fat, polyunsaturated fat, monounsaturated fat, and cholesterol.
- Clients will be able to identify foods which contain a large amount of saturated, polyunsaturated and monounsaturated fat and cholesterol.
- Clients will agree to use less saturated fats.

Lesson

Eating a diet high in fat, especially saturated fat, has been associated with an increased risk of breast cancer. To decrease your risk of developing cancer as well as many other diseases , you can choose foods low in saturated fats.

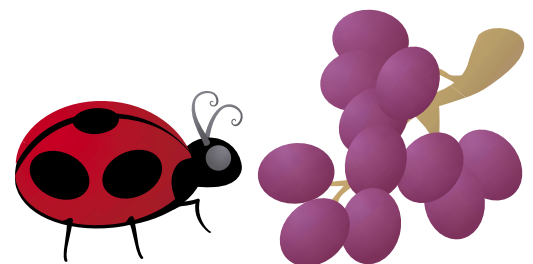
But what are saturated fats? And what are monounsaturated and polyunsaturated fats? Are they better for me? Why do I need to be concerned about saturated fats?

To begin, saturated fats come primarily from animals. Not only do they come from cows, pigs, chicken and pork, they also come from

Time
45 minutes

Preparation
• Read through lesson

Handouts
• *A Primer on Fats and Oils*
• What Do You Think?



Fat Know How

butter and milk. Can anyone tell me why? Answer: because these products come from animals. One way you can identify saturated fats is whether or not they are solid at room temperature—like butter. If you leave butter on the table, it is solid. It is solid because it is primarily saturated fat.

Polyunsaturated fats are usually liquid at room temperature. Oils that have polyunsaturated fats are safflower, sunflower, corn, and soybean oils. What is common about all of these oils? Answer: they do NOT come from animals.

Finally, there are monounsaturated fats. These are also liquid at room temperature and do NOT come from animals. Examples of monounsaturated fats are canola and olive oils.

So that takes care of the fats, but what about cholesterol? What is cholesterol? Cholesterol is a fatty substance in our blood. You may have heard people saying, “The doctor says my cholesterol is high. That increases my risk of a heart attack.” The reason cholesterol—and other fatty things in our blood—stick to the walls of our arteries. Our arteries keep blood flowing through our body. So when things start sticking to our arteries, blood doesn’t flow very well. And when that happens—watch out—there’s a chance of a heart attack.

Think about a garden hose. When the garden hose is clean, the water flows through easily. But when dirt and other things get stuck in the hose, the water can’t flow through. The same thing happens in our body. If something is blocking our arteries, blood can’t get to where it needs to go.

So how do we accumulate cholesterol in our arteries? And more importantly, how do we get rid of too much cholesterol in our blood? Cholesterol is made by your body. In addition to the cholesterol our bodies produce, cholesterol also comes from the foods we eat. So the best way to make a dent in your cholesterol levels, is to watch what you eat. You want to be particularly careful of foods that come from animals because they can have a lot of cholesterol in them.

The most important thing you can do to help your cholesterol level is watch your fat intake, especially your saturated fat intake. And where does saturated fat come again? That’s right—a lot of it comes from animals and animal products.

So what are some things you can do to cut down the amount of fat—especially saturated fat—you eat?



Pass out the [A Primer on Fats and Oils](#) and/or [Sobre la Nutricion—Conocimientos Basicos Sobre Grasas, Aceites y Colesterol](#). Review relevant tips for a healthful eating plan section.



Use models to highlight the effect of cholesterol on our arteries (see if your agency has models—if not, consider buying models or borrowing models from another agency).

- clogged artery model
- test tubes with fat
- one pound or five pounds of fat



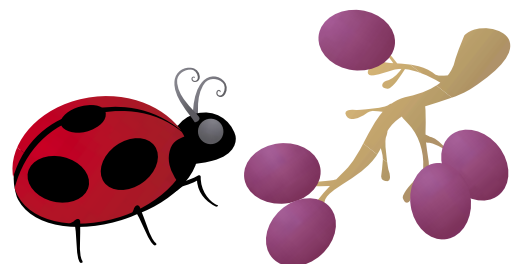
Pass out the What Do You Think? handout. Review the two food labels. Point out which one has more fat. Also point out which one has more cholesterol. The corn chowder has more cholesterol because of the cream. Cream is an animal product. Bring in other food labels. Compare their fat and cholesterol content. Ask clients which foods are the lowest fat choices.

Educational Activities

- Go to the grocery market. Use the food labels from a variety of foods to discuss whether or not a food is high in saturated fat. According to the *Dietary Guidelines for Americans, 2000*, foods should contain less than 10% of saturated fat.
- Ask clients to bring in recipes and/or labels from foods they commonly eat. Go over the recipes and labels and point out where she/he can use less fat or substitute other types of fat.
- Collect client's recipes. Give them to a dietitian (see Ask A Dietitian in Appendix) to review. Ask him/her to substitute lower fat ingredients to reduce the amount of fat in their recipe. Ask the dietitian to come in and review the revised recipes with the group.
- Review the role of fiber in controlling cholesterol (see Appendix).

Related Lessons

- Healthy Eating 1.6: The Skinny on Fat
- Healthy Eating 1.7: What Do Nutrition Labels Really Tell Us?





What Do You Think?

Today we learned about the different types of fats we eat. Let's look at 2 food labels and see which one has less fat.

Corn Chowder

NUTRITION FACTS	
Serving Size 1 cup	
Servings Per Container: 2	
Amount Per Serving	
Calories 210	Calories from Fat 120
%Daily Value*	
TOTAL FAT 13 g	20%
Saturated Fat 5 g	25%
CHOLESTEROL 15 mg	5%
SODIUM 800 mg	33%
TOTAL CARB. 15 g	6%
Dietary Fiber 2 g	8%
Sugars 1 g	
PROTEIN 5 g	
Vitamin A 0%	Vitamin C 15%
Calcium 0%	Iron 2%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	

Vegetable Soup

NUTRITION FACTS	
Serving Size 1 cup	
Servings Per Container: 2	
Amount Per Serving	
Calories 130	Calories from Fat 35
%Daily Value*	
TOTAL FAT 3.5 g	5%
Saturated Fat 1 g	5%
CHOLESTEROL 0 mg	0%
SODIUM 870 mg	36%
TOTAL CARB. 22 g	7%
Dietary Fiber 4 g	16%
Sugars 5 g	
PROTEIN 3 g	
Vitamin A 80%	Vitamin C 2%
Calcium 4%	Iron 6%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	

Which soup has more fat? _____

Which soup has more saturated fat? _____

Which soup has more cholesterol? _____

Which soup would you choose to eat? Why?



What Do You Think? Answer Sheet

Today we learned about the different types of fats we eat. Let's look at 2 food labels and see which one has less fat.

Corn Chowder

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Sugars 1 g	
PROTEIN 5 g	
Vitamin A 0% • Vitamin C 15%	
Calcium 0% • Iron 2%	
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Vegetable Soup

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PROTEIN 3 g	
Vitamin A 80% • Vitamin C 2%	
Calcium 4% • Iron 6%	
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	

Which soup has more fat? Corn chowder

Which soup has more saturated fat? Corn chowder

Which soup has more cholesterol? Corn chowder (because of the cream)

Which soup would you choose to eat? Why?

The vegetable soup because it has less fat and cholesterol. The vegetable soup also has fewer calories per serving.



The Skinny on Fat

Lesson Overview

Clients learn three strategies to eat less fat.

Rationale

Eating a low fat diet decreases the risk of many forms of cancer.

Goals

Clients will choose to eat lower fat foods.

Objectives

- Clients will be able to identify lower fat and higher fat food options in each section of the Food Guide Pyramid.
- Clients will learn: 1) to eat lower fat versions, 2) eat high fat foods less often, 3) or eat smaller portions of high fat foods to decrease their risk of breast cancer.

Lesson

Eating a diet high in fat, especially saturated fat, has been associated with an increased risk of breast cancer. To decrease your risk of developing cancer as well as many other diseases like diabetes, heart disease, and obesity, you can choose to eat foods lower in fat. But first you need to be able to identify which foods are higher in fat and which are lower in fat. In this lesson, we will review one way to determine whether or not a food is high in fat.

In order to make lower fat choices you need to be able to identify high fat foods. To do this, you can always use food labels to calculate the fat content in foods. You can also use your sense to “see” or “feel” the fat in foods.



Have clients look at the foods that are on the paper bags. Point out that high fat foods leave a greasy mark on the paper bag. To emphasize the point, draw a circle around the

Time

45 minutes

Preparation

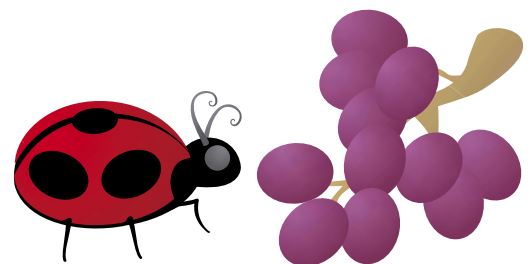
- Buy potato chips, peanut butter, pork rinds, sweet bread, bread, a croissant, pretzels, butter, paper bags
- Place each item on a section of the paper bag at least 1 hour before the client(s) comes to see you

Materials Needed

- Paper bag

Handouts

- Food Guide Pyramid
- Watch the Fat Drip Away
- Finding My Way To Lower Fat Foods



The Skinny on Fat

stain on the paper bag with a darker marker. Explain that the “stains” on the bag are a result of fat leaking out the foods onto the bags. Lower fat foods, like the bread, do not leave that greasy mark. Ask clients if they have ever picked up a food and had it leave a greasy film on their hands. Explain that the greasy film means that the food is probably high in fat. Foods like croissants, potato chips, pork rinds, cookies, steaks, etc. This doesn’t ensure that foods that don’t leave this film are low in fat (for example, ice cream), but if the greasy film is present, then it is more than likely that that food DOES contain a lot of fat (i.e. this is one way to identify foods that are high in fat, but not necessarily a good way to identify a low fat item).

💧 Pull out the Food Guide Pyramid. Tell clients that each section of the Food Guide Pyramid has higher fat food options (fried rice) and lower fat food options (rice). Go over foods that fall into each category and determine if it is a high fat or a low fat food choice. If it is a high fat food choice, ask clients to tell you how they can make a healthier food choice (ex. instead of a flour tortilla made with lard, choose a corn tortilla).

There are other ways to cut fat in your diet. Three key things you can do are:

- You can choose to eat high fat foods less often. Instead of having ice cream every day, you can choose to eat it 2 or 3 times each week.
- You can also choose lower fat versions of certain foods. An example would be if you ate frozen yogurt instead of ice cream.
- You can also choose to eat a smaller amount of a high fat food. In the case of ice cream, you could choose the small cone instead of a double scoop.

💧 Go over the Watch the Fat Drip Away handout. Go over each strategy to lower fat. Clients can choose to eat half a sandwich (eat smaller portions of high fat foods items), put low fat cheese in their sandwiches (choose lower fat versions), choose not to use mayonnaise (eat high fat foods less often), and/or use a lower fat mayonnaise on their sandwich (choose lower fat versions).

💧 Ask clients about other foods they commonly eat. For instance, if they drink coffee, ask them what they put in their coffee. If it is a non-dairy creamer, whole milk, or half and half—point out that these items are high in fat. Use food labels when possible.

💧 Ask clients to list three high fat foods that they like to eat. Write their answers on the Finding My Way To Lower Fat Foods. Complete the handout. Go over client’s plan to eat less fat. Make sure their food choices are low in fat. Ask them to try to use these foods instead of their higher fat counterparts for the next week.

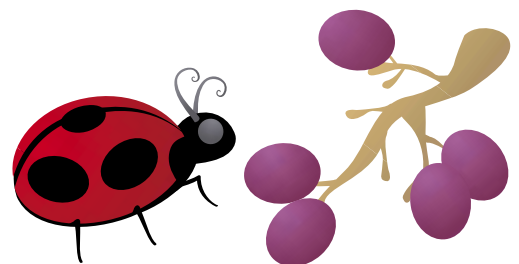
- Schedule a phone call or in-person meeting with the client(s) to go over any obstacles they encountered while they were trying to make lower fat food choices.
- Wrap up by going over how to identify high fat foods and how to make lower fat substitutions.
- Schedule a follow-up phone call with clients to review their Finding My Way To Lower Fat Foods plan. Review what worked, what didn't work and why. For more advanced clients who reached their goals, ask them to choose three new foods to target.

Educational Activities

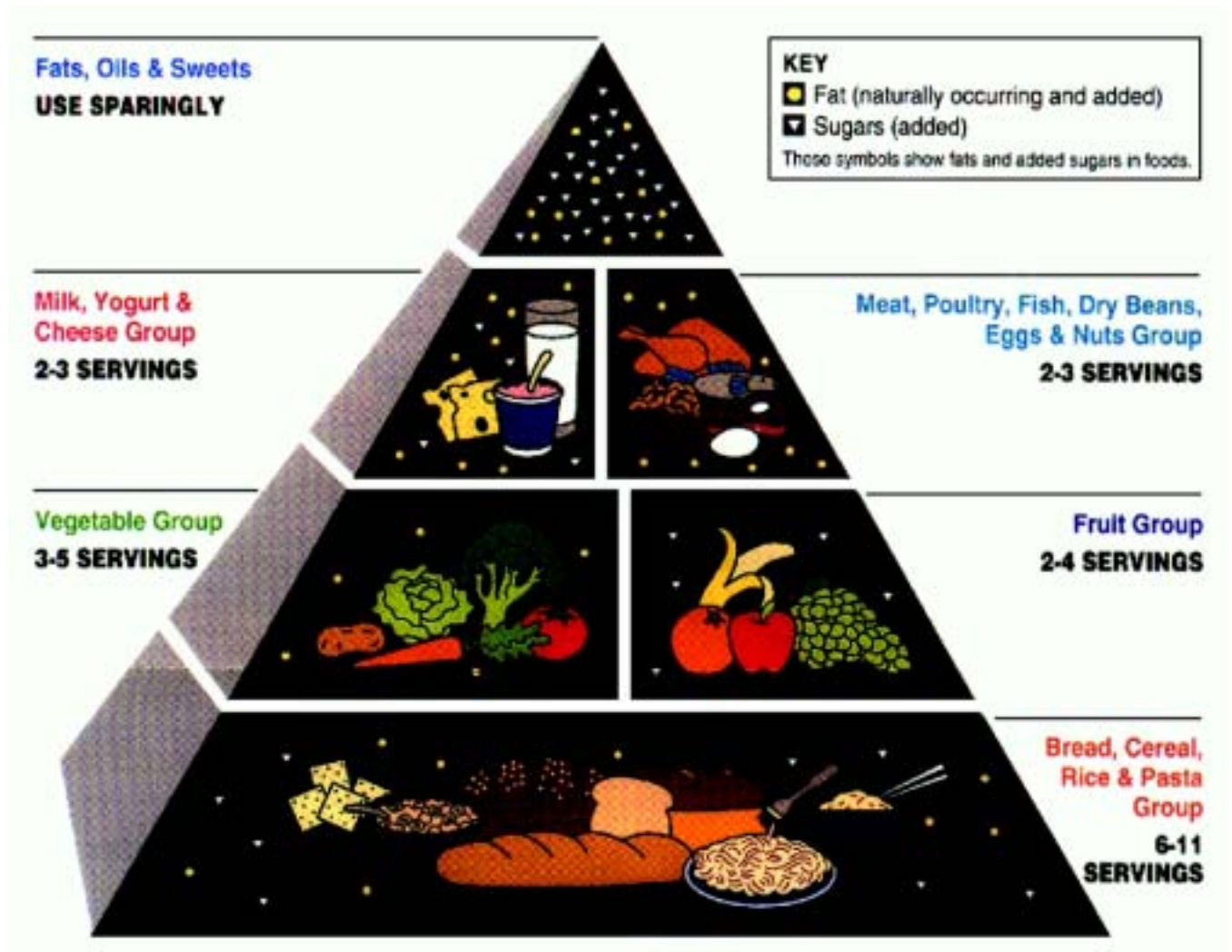
- Pass out the Can't Afford to Buy Fruits and Vegetables for Your Family? handout (Healthy Eating 1.1). Go over the savings of buying high quality, nutritious foods.
- Schedule a group meeting with 4-6 other clients. Brainstorm ways to overcome any obstacles clients encountered when they tried to lower the fat in their diets.

Related Lessons

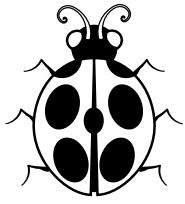
- Healthy Eating 1.7: What Do Nutrition Labels Really Tell Us?
- Healthy Eating 1.5: Fat Know How



The Food Guide Pyramid

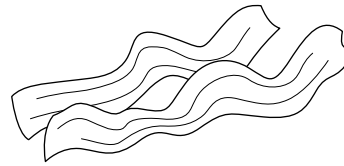
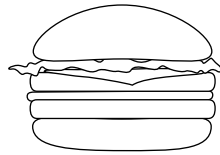


Adapted from the United States Department of Agriculture/United States Department of Health and Human Services Food Guide Pyramid.

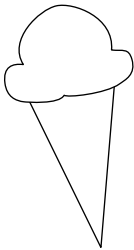


Watch the Fat Drip Away

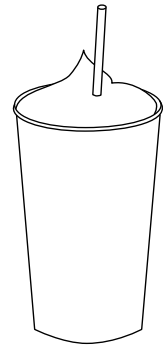
How can you lower some of the fat in the picture below?



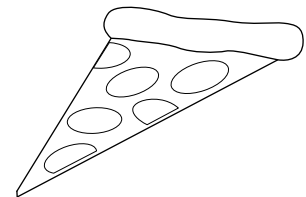
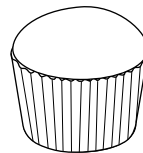
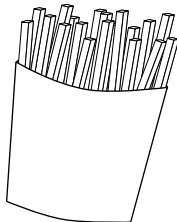
EAT HIGH FAT FOODS LESS OFTEN

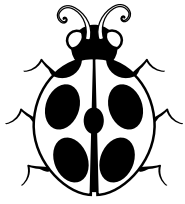


CHOOSE LOWER FAT VERSIONS



EAT SMALLER PORTIONS OF HIGH FAT FOOD ITEMS





Finding My Way to Lower Fat Foods

What are three high fat foods that you like to eat?

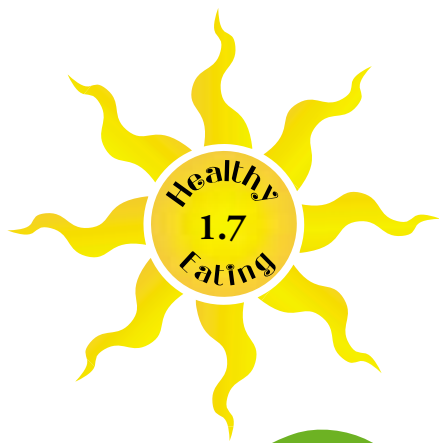
Next week I will try to substitute, eat a lower fat version or eat a smaller portion of the following foods:

Instead of:

Example: Eating a bag of pork rinds

I will:

Eat 1/4 of the bag



Time
45 minutes

Preparation

- Order the *Dietary Guidelines for Americans, 2000* (see Appendix)
- Bring in food labels for Farina, Cream of Wheat, oatmeal, and breakfast cereals
- Ask clients to bring food labels
- Bring in other food labels for comparison
- Make at least 2 copies of *What's Inside the Package* for each client

Materials Needed

- Chalkboard or flipchart
- Pens or pencils
- Measuring cups, spoons, and a scale
- Review *The New Food Label: There's Something In It For Everybody* (Appendix)

Handouts

- *Dietary Guidelines for Americans, 2000*
- Nutrition Facts

What Do Nutritional Labels Really Tell Us?

Lesson Overview

In this lesson, clients learn how to use the **Nutrition Facts** label to make healthful food choices.

Rationale

Reading food labels enables clients to make healthier food choices.

Goals

Clients will use food labels to purchase healthful foods.

Objectives

- Clients will learn how to read food labels.
- Clients will learn how to use the food label to make healthful food choices.

Lesson

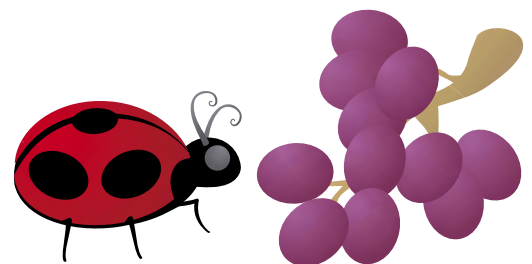
Everyday we must make decisions about food. But how do we make those decisions? Many of us base our decisions on convenience, taste, cost, etc. We should also base our decisions on nutrition.

So how do we learn which foods are nutritious? One thing that we can use is the **Nutrition Facts** label.

Nutrition Facts labels give us a lot of information about nutrition. We can use them to compare the fat content of various foods. We can also use them to compare other nutrients—like iron and calcium. For instance you may compare breakfast foods like Farina, Cream of Wheat, oatmeal and breakfast cereal.



Go over the Farina, Cream of Wheat, oatmeal, and breakfast cereal food labels. Compare the fat, iron, and calcium content of each. Explain that one may be high in one nutrient while another is high in another nutrient. The important thing is to find out is which food provides the most nutri-



What Do Nutritional Labels Really Tell Us?

tion. For instance, if a cereal is low in fat and high in iron, it may be the best choice if the others are higher in fat or don't provide any iron.

This type of information helps us to stay healthy, and may even help prevent the risk of developing certain diseases—like cancer, diabetes, obesity, and heart disease.

So, what makes a healthy diet? The new *Dietary Guidelines for Americans, 2000* are the ABCs of a healthy diet. Specifically, the Guidelines tell us to—

Aim for fitness

Build a healthy base

Choose sensibly for good health



Pass out the *Dietary Guidelines for Americans, 2000* (see Appendix for ordering information). Review each section of the pamphlet with clients.

Reading **Nutrition Facts** labels helps us to choose foods sensibly and build a healthy body. They give us the information we need to compare foods with one another and then select foods based upon the nutrients they provide.

I have a few samples. Hopefully you brought in labels from some of the foods you like. We're going to use these food labels to compare foods to one another. Then we're going to figure out which foods are healthier choices.



Pass out the Nutrition Facts handout. If you are in a group setting, break up the class into groups of 3 or 4. Give each group two food labels from similar foods (like whole milk and low fat milk, butter and margarine, ice cream and frozen yogurt, frozen vegetables and canned vegetables, canned fruits in heavy syrup and canned fruits in natural juice, two types of cereals, etc.)

One of the first things you will notice about food labels is the serving size and the servings per container.

<p>••••• NUTRITION FACTS •••••</p> <p>• Serving Size _____</p> <p>• Servings Per Container _____</p>

This is very important information because the serving size may be significantly different than the portion sizes we eat. For example, on the label of this cereal box, it shows one serving is equal to 1 cup. But do you really eat 1 cup? Let's measure 1 cup of this cereal.



Pour 1 cup of the cereal into the measuring cup. Let everyone see what one serving looks like. If you have bowls available, pour the cereal into a bowl. Ask clients if this is the amount of cereal they normally eat. You can do the same thing with cooked rice, Farina, or even cut up brownies.

As you can see, you may eat more than one serving of certain foods. This is very important to know because you could really be eating two or three times as much as you thought you were.

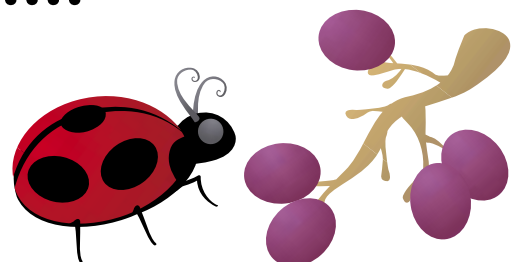
The next section shows you how many calories per serving and how many fat calories per serving are in this product.

Amount Per Serving	
Calories ____	Calories from Fat ____

In this example, how many calories are we eating? And if we eat 2 cups, how many calories are we eating? Right—that is two times the calories listed on the label.

The next section of the label shows you information about certain nutrients—total fat, saturated fat, cholesterol, sodium, carbohydrate, fiber, sugar, protein, vitamin A, vitamin C, calcium, and iron. Other nutrients can be listed, but only under a voluntary basis. Does anyone see other nutrients listed on their food label?

%Daily Value*	
TOTAL FAT ____g	____%
Saturated Fat ____g	____%
CHOLESTEROL ____mg	____%
SODIUM ____mg	____%
TOTAL CARBOHYDRATE ____g	____%
Dietary Fiber ____g	____%
Sugars ____g	
PROTEIN ____g	
Vitamin A ____ %	Vitamin C ____%
Calcium ____ %	Iron ____%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	



What Do Nutritional Labels Really Tell Us?

Now, let's start comparing foods based on the information we get from their labels. Take 10 minutes and fill out the Nutrition Facts handout. After we are done, we'll look at how these foods are similar and how they are different.

- If you are working in a group setting, give each group two food labels from similar products. Go around the room. If you are working one-on-one, then go through the exercise with the client, pointing out the various areas of the food label.

Now, I'd like each group to tell me what two food labels you are comparing. Then tell me how they are different and how they are similar. Tell me which product you would choose and why.

- After each group reports back, point out that one reason a person may choose one food over another is because of the fat content. Other choices may be due to the sodium content or the dietary fiber each serving contributes. Ideally you want foods low in fat and sodium and high in dietary fiber.

So you can see how this label can help you make food choices while you are at the supermarket or grocery store. **Nutrition Facts** labels help you look at two similar products and choose the healthier product. If you are choosing a product because you want to see which food has less fat, what would you look at?

- You would first see if the serving sizes are the same. Then, you could look at the calories from fat or the total fat grams in each product.

As you probably know, we recommend eating fewer than 30% of total calories from fat for health reasons. This figure may seem daunting because you may think you need to perform a complex math calculation to figure out whether or not this food has 30% of calories from fat. This is not the case, however. There are two things you can do instead.

- You can divide the calories from fat by the total calories (point these two numbers out on the label). This may seem difficult, especially if you do not have a calculator handy.

REDUCED FAT MILK 2% Milkfat

NUTRITION FACTS	
Serving Size 1 cup (236 ml)	
Servings Per Container: 1	
Amount Per Serving	
Calories 120	Calories from Fat 45
%Daily Value*	
TOTAL FAT 5 g	8%

In this example, 45 calories from fat divided by 120 total calories. This means this food has 37% of calories from fat.

- Instead of doing this calculation, you can look at the fat grams. If there are more than 3 grams of fat for every 100 calories, this food contains more than 30% of calories come from fat. In this example, there are 5 grams of fat and 120 calories. One hundred and twenty is only a little bit more than 100 and 5 is almost 2 times 3. According to our rule of thumb, this means this is a higher fat food because there are approximately 6 grams of fat for every 100 calories.

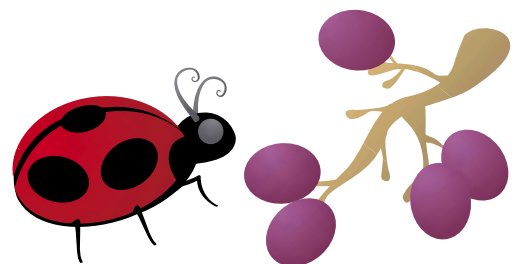
Let's do another example.



Go through an example. Use one of the food labels and work through each method. After you have completed the activity, ask each person to look at their **Nutrition Facts** labels and see if it is a higher fat food or a lower fat food.

This was an introduction to the **Nutrition Facts** label. It is a powerful tool for making healthful food choices. The next time you are at the supermarket or grocery store, look at various food labels. Look to see if the food you are choosing is low in fat. If it is not, ask yourself, is there another product that has less fat or fewer calories?

I'd like you all to turn in your worksheets (use these worksheets to evaluate your clients' knowledge. If they are having difficulty, go through a few more examples together). I gave you two because I'd like you to use these handouts at home. Look through your cupboards and fill out this worksheet. You may be surprised that some foods that you thought were low in fat actually have quite a bit of fat.



What Do Nutritional Labels Really Tell Us?



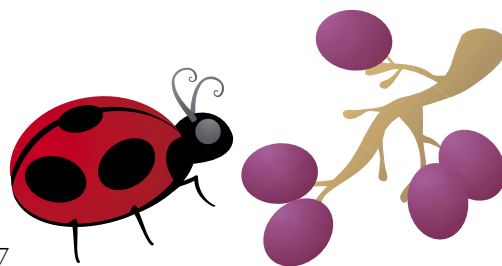
Pass out additional worksheets. If you are going to meet with client(s) again, tell her/him/them that you will discuss what they found at your next meeting.

Educational Activities

- Schedule a group class with 4-6 clients. Go over different food labels. Use the various food labels to compare healthier food options with less healthy food options.
- Go through the lessons in *The New Food Label: There's Something In It for Everybody* (see Appendix)
- Go through the *Dietary Guidelines for Americans, 2000*.

Related Lessons

- Healthy Eating 1.2: If I Eat This Many Servings, Won't I Look Like the Food Guide Pyramid?
- Healthy Eating 1.3: Feeling Fine with Five Fruits and Vegetables A Day
- Healthy Eating 1.5: Fat Know How
- Healthy Eating 1.6: The Skinny on Fat





The great thing about a food label is that it tells you what's inside!

- Write down the Nutrition Facts about one food in one of the blank samples below.
- Then find a similar food for comparison. Write down the Nutrition Facts from that food in the other blank sample below.
- When you're done, compare them:

How are these foods similar?

How are they different?

FOOD PRODUCT I

NUTRITION FACTS	
Serving Size _____	
Servings Per Container _____	
Amount Per Serving	
Calories _____	Calories from Fat _____
%Daily Value*	
TOTAL FAT _____g	_____%
Saturated Fat _____g	_____%
CHOLESTEROL _____mg	_____%
SODIUM _____mg	_____%
TOTAL CARBOHYDRATE _____g	_____%
Dietary Fiber _____g	_____%
Sugars _____g	
PROTEIN _____g	
Vitamin A _____%	Vitamin C _____%
Calcium _____%	Iron _____%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	

FOOD PRODUCT II

NUTRITION FACTS	
Serving Size _____	
Servings Per Container _____	
Amount Per Serving	
Calories _____	Calories from Fat _____
%Daily Value*	
TOTAL FAT _____g	_____%
Saturated Fat _____g	_____%
CHOLESTEROL _____mg	_____%
SODIUM _____mg	_____%
TOTAL CARBOHYDRATE _____g	_____%
Dietary Fiber _____g	_____%
Sugars _____g	
PROTEIN _____g	
Vitamin A _____%	Vitamin C _____%
Calcium _____%	Iron _____%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	



Sample of labels from Two Similar Foods:

REDUCED FAT MILK 2% Milkfat	
NUTRITION FACTS	
Serving Size 1 cup (236 ml)	
Servings Per Container: 1	
Amount Per Serving	
Calories 120	Calories from Fat 45
%Daily Value*	
TOTAL FAT 5 g	8%
Saturated Fat 5 g	25%
CHOLESTEROL 20 mg	15%
SODIUM 120 mg	5%
TOTAL CARB. 11 mg	4%
Dietary Fiber 0 g	0%
Sugars 11 g	
PROTEIN 9 g	
Vitamin A 10% • Vitamin C 4%	
Calcium 30% • Iron 0% • Vitamin D 25%	
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	

CHOCOLATE NON FAT MILK	
NUTRITION FACTS	
Serving Size 1 cup (236 ml)	
Servings Per Container: 1	
Amount Per Serving	
Calories 80	Calories from Fat 0
%Daily Value*	
TOTAL FAT 0 g	0%
Saturated Fat 0 g	0%
CHOLESTEROL Less than 5 mg	0%
SODIUM 120 mg	5%
TOTAL CARB. 11 mg	4%
Dietary Fiber 0 g	0%
Sugars 11 g	
PROTEIN 9 g	
Vitamin A 10% • Vitamin C 4%	
Calcium 30% • Iron 0% • Vitamin D 25%	
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	

Note: The chocolate nonfat milk has fewer calories and less calories from fat yet both products contain the same amount of calcium.

Is the reduced fat milk a low fat product?

No because 45 calories from fat divided by 120 calories is more than 30% from fat.

There is also more than 3 grams of fat for every 100 calories. There are almost 6 grams of fat and only a little more than 100 calories.

Is the nonfat milk a low fat product?

Yes because 0% of the total calories come from fat.

Both products are good sources of calcium, but you can drink the nonfat chocolate milk and get far fewer calories and much less fat.



Oh... the Wonders of Water

Lesson Overview

Clients learn about the function of water and strategies for drinking more water throughout the day.

Rationale

Bodies need an adequate supply of water to function normally.

Goals

Clients will drink 8-12 cups of water daily.

Objectives

- Clients will learn about the function of water in their bodies.
- Clients will learn how to drink an adequate amount of water throughout the day.

Lesson

Water is a major component of our bodies. Do you know what percentage of our body is made up of water? Our bodies are made up of approximately 55-75% water! Does that sound like a lot to you? Yes—it is a lot! Our blood, muscles, fat, and even our bones have water in them. Water is a vital nutrient.

Our bodies use water for almost every function and process. In fact, our bodies can't work properly unless we get enough water. Our bodies use water:

- to regulate our body temperature
- to carry oxygen to our cells
- to get rid of waste and poisons
- to help absorb some nutrients
- to moisten body tissues like our mouths, eyes, nose

Time
30 minutes

Preparation

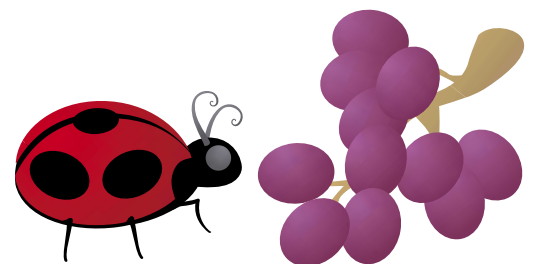
- Read through the lesson
- Contact the Department of Health Services Cancer Detection Section Clearing-house for recommendations of incentive items (see Appendix)

Materials Needed

- Pens or pencils
- Incentive items—preferably a water bottle (see Appendix)

Handouts

- The Wonderful Wonders of Water



Oh... the Wonders of Water

- to keep our joints moving smoothly
- to help digestion
- to keep our bowel movements regular

If your body is deprived of water, you may start experiencing headaches, weakness, fatigue, heat stroke, and in extreme cases, even death. Our bodies can only live about a week without water.

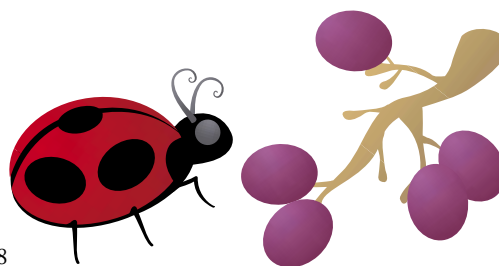
And you may think you only need water when you are thirsty. The fact is, you may need water long before you even start to begin feeling thirsty. The average person needs about 8-12 cups of water a day. This number will change depending on your body composition as well as your body weight. It also depends on other factors, like the weather, humidity, and even whether or not you are sick. Think about it—if you are sick, you may have a fever. And what is one function of water? Yes, that is right—water helps your body regulate body temperature. So if your body temperature is higher than normal, your body is using water to try to bring it down to normal. In addition to the fever, you may have diarrhea and/or be vomiting. You may get dehydrated if you don't drink enough water and other fluids.

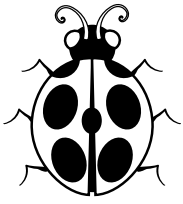
And what about the weather? Well, if the weather is hotter or colder than normal, your body is working hard to stay at 98.6 degrees. And it is using water to do this. If heaters or air conditioners are on, your skin loses water. Therefore you need to drink water to replace the water lost from your skin.

But don't worry. You can get water from many different sources—water, food, even your own body (water is a by-product of many processes in the body). The key isn't where you get it—the key is getting enough. One way to determine whether or not you are getting enough water is to look at your urine. If your urine is light in color, you are probably drinking enough water.

So what are some ways you get more water throughout the day?

- Pass out The Wonderful Wonders of Water. Review the handout and ask clients if they can think of other ways to drink more water throughout the day.
- Wrap up the session by reviewing the various functions of water in the body and strategies for drinking more water throughout the day. Pass out incentive items.





The Wonderful Wonders of Water

Water is one of the most important nutrients. Our bodies need water to function properly. . . yet we may not get enough. So how can you get your 8-12 cups a day?

Drink a cup of water while you are getting ready in the morning.

Keep a water bottle near your work area and take small sips every 10-15 minutes.

Take a 2-5 minute break and walk to get a cup of water.

Drink water instead of coffee or soda in the morning, during the meals, and after dinner.

Always carry a water bottle while you are on the road—either in the car, on the bus, and on airplanes.

Eat foods that contain large amounts of water:

- | | | |
|--------------|--|---------------------------|
| • Oranges | • Mango | • Low-fat or non-fat milk |
| • Watermelon | • Grapes | • Lettuce |
| • Apples | • Broth-based soups | • Carrots |
| • Kiwi | • Fruit smoothies | • Broccoli |
| • Papaya | • 100% fruit juice and sparkling water | • Yogurt with berries |

Eat fruits or drink fruit juice for a snack.

For a little pizzazz, add a slice of lemon, lime or orange to sparkling water.

Drink a glass of water before you go to bed.



Can't Get Enough Calcium?

Lesson Overview

Clients learn about the relationship between calcium and osteoporosis. To help prevent osteoporosis, clients learn how to select calcium-rich foods.

Rationale

An adequate intake of calcium helps prevent the risk of developing osteoporosis. Osteoporosis thins bones and bones may break more easily.

Goals

Clients will eat a variety of calcium-rich foods.

Objectives

- Clients will understand the causes of osteoporosis.
- Clients will learn how calcium reduces the risk of developing osteoporosis.
- Clients will identify calcium-rich foods.

Lesson



Show client(s) the photograph of healthy bones versus bones affected by osteoporosis. Point out that the healthy bone is dense. The osteoporotic bone is porous and fragile. A porous bone provides less structure and fractures easily. A person with osteoporosis has fragile bones and fractures their bones when they are doing everyday activities, like walking, stepping up or down stairs.

Osteoporosis is a disease that affects many menopausal women. It develops gradually over time and can cause bone fractures in people

Time
30 minutes

Preparation

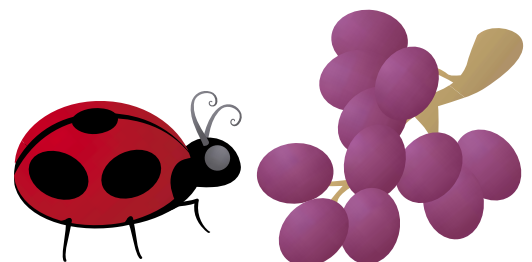
- Read through the lesson
- Locate a photograph of a healthy bone vs. a porous bone
 - National Osteoporosis Foundation at www.nof.org/osteoporosis/bonehealth.htm
 - The American Dietetic Association's Food and Nutrition Guide

Materials Needed

- Display the photograph of healthy vs. porous bones

Handouts

- Curious About Calcium?
- What Do You Think?



Can't Get Enough Calcium?

who are performing regular movements. Approximately 25 million Americans suffer from osteoporosis, the majority of which are women over the age of 50 years.

So what can you do prevent osteoporosis? Well, bones are built up fairly early in life. Bones continue to grow and get stronger in people until they reach 20 to 30 years of age. Bones become denser, however, until you reach about 35 years of age. You may think that once bones reach this maximum density that the story is over. This is not the case, however. Calcium continues to be deposited and is pulled from the skeleton.

In addition to providing structure for our bones, calcium also helps our bodies function. Calcium helps our muscles transmit signals, our hearts beat regularly, clot our blood, and other everyday activities. If you do not get enough calcium, your body starts to pull calcium from wherever it can get it. In most cases this means it starts to pull calcium from your bones. To prevent this from happening, you need to eat plenty of calcium-rich foods.

There are plenty of calcium-rich foods to choose from. As you may suspect, dairy foods like milk, cheese and yogurt are good sources of calcium. But did you know there are other foods rich in calcium? These foods include:

- Tofu
- Calcium-fortified orange juice
- Canned salmon
- Canned sardines with edible bones
- Dark green leafy vegetables like kale, mustard greens, turnip greens, spinach
- Broccoli
- Bok choy
- Dried figs
- Dried beans

Dairy foods are usually the best sources of calcium because they contain Vitamin D. Vitamin D acts as a carrier of calcium and deposits the calcium in bones. Therefore, you want to make sure you get plenty of calcium AND Vitamin D. As I mentioned, dairy products contain both. This doesn't mean you should rely solely on dairy foods to prevent osteoporosis. You get Vitamin D from sunlight and ultraviolet light as well, so you can eat plenty of dark leafy greens and absorb calcium as long as you get approximately 30 minutes of sunshine 2 or 3 times per week.

So now that you know where calcium comes from and how it prevents osteoporosis, how can you incorporate it into your diet? There are a few things you can do*:

*Some of these foods may not be covered by the Food Stamps Program.

- Eat yogurt mixed with dried figs and fruit for breakfast
- Take a yogurt shake with frozen fruits with you for breakfast
- Use low fat milk in soups
- Add low fat milk to your coffee
- Drink calcium-fortified juices for a snacks
- Add canned salmon with edible bones to salads or sandwiches
- Add dark green leafy vegetables to stir-fry dishes
- Add tofu to soups and sauces



Give the Curious About Calcium? handout to client(s). Ask client(s) to think of other ways they can add calcium-rich foods to their diets. Write client(s)' ideas on the worksheet.

Calcium supplements are also available. Not all supplements are the same, however, so always consult your physician before taking any over-the-counter products.

Another very important way to prevent osteoporosis is to perform weight-bearing activities.

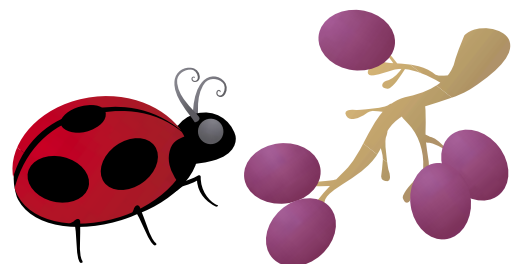


Review **Why Weight-Bearing Activities?** lesson (Physical Fitness 2.5) with client(s) if appropriate.

Osteoporosis is a harmful disease that can sneak up when you are least expecting it. Many people do not even know they have osteoporosis until they fracture a bone. Because it sneaks up, especially in postmenopausal women, it is important to take steps to maintain your bone health. You can do this by incorporating more calcium-rich foods into your diet, performing weight-bearing activities, and reviewing other risk factors like family history, smoking, alcohol intake, and body weight with your physician.



Pass out the What Do You Think? handout. Review client(s)' questions. Ask client(s) if they have any questions.



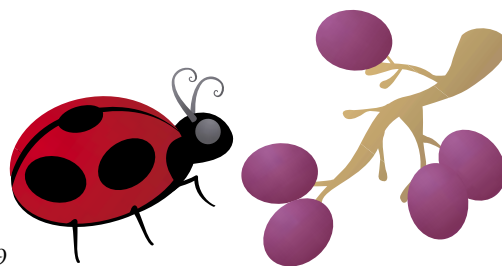
Can't Get Enough Calcium?

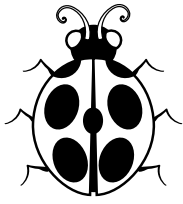
Educational Activities

- Buy a variety of high-calcium foods. As you pull out each item from the grocery bag, discuss how much the item costs and how many servings come in a package. For instance, as you pull out a 1 pound bag of dried pinto beans, point out it costs 79 cents and provides 13 servings. Next, pull out a 16-ounce container of low-fat cottage cheese. Point out it costs \$2.39 and provides 3.5 servings. Ask clients to evaluate which item is a better value for their money. Continue this exercise with other calcium-rich foods.

Related Lessons

- Physical Fitness 2.5: Why Weight-Bearing Activities?





Curious About Calcium?

Although dairy foods are the best sources of calcium, there are a variety of other foods that contain large amounts of calcium. Try to think of as many ways to add these foods into your diet.

Milk

Cheese

Yogurt

Broccoli

Bok choy

Dried beans



Calcium-fortified orange juice

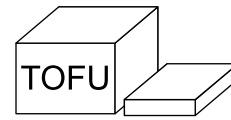
Canned salmon

Sardines with edible bones

Tofu

Dried figs

Dark green leafy vegetables like kale, mustard greens, turnip greens, spinach



- Eat yogurt mixed with dried figs and fruit for breakfast
- Take a yogurt shake with frozen fruits with you for breakfast
- Use low fat milk in soups
- Add low fat milk to your coffee
- Drink calcium-fortified juices
- Add canned salmon with edible bones to salads or sandwiches
- Add dark green leafy vegetables to stir-fry dishes
- Add tofu to soups and sauces

Can you think of other ways to add these calcium-rich foods to your diets?



What Do You Think?

Today we learned that osteoporosis causes our bones to thin. We learned that getting plenty of calcium helps reduce the risk of getting osteoporosis. Can you identify which foods have a lot of calcium? Circle the foods below that you think have a lot of calcium. When you are done, we will talk about them.

Tofu Cranberries Potato Chips Spinach

Milk Coffee Orange Juice Dried Beans

Soda Rice Yogurt Broccoli Chicken

Healthy Lifestyle Curriculum in Reducing the Risk of Breast Cancer: Healthy Eating 1.9



What Do You Think? Answer Sheet

Tofu, milk, spinach, yogurt, broccoli and dried beans are calcium-rich foods. Regular orange juice does not have calcium—only calcium-fortified orange juice contains calcium. Emphasize this difference.